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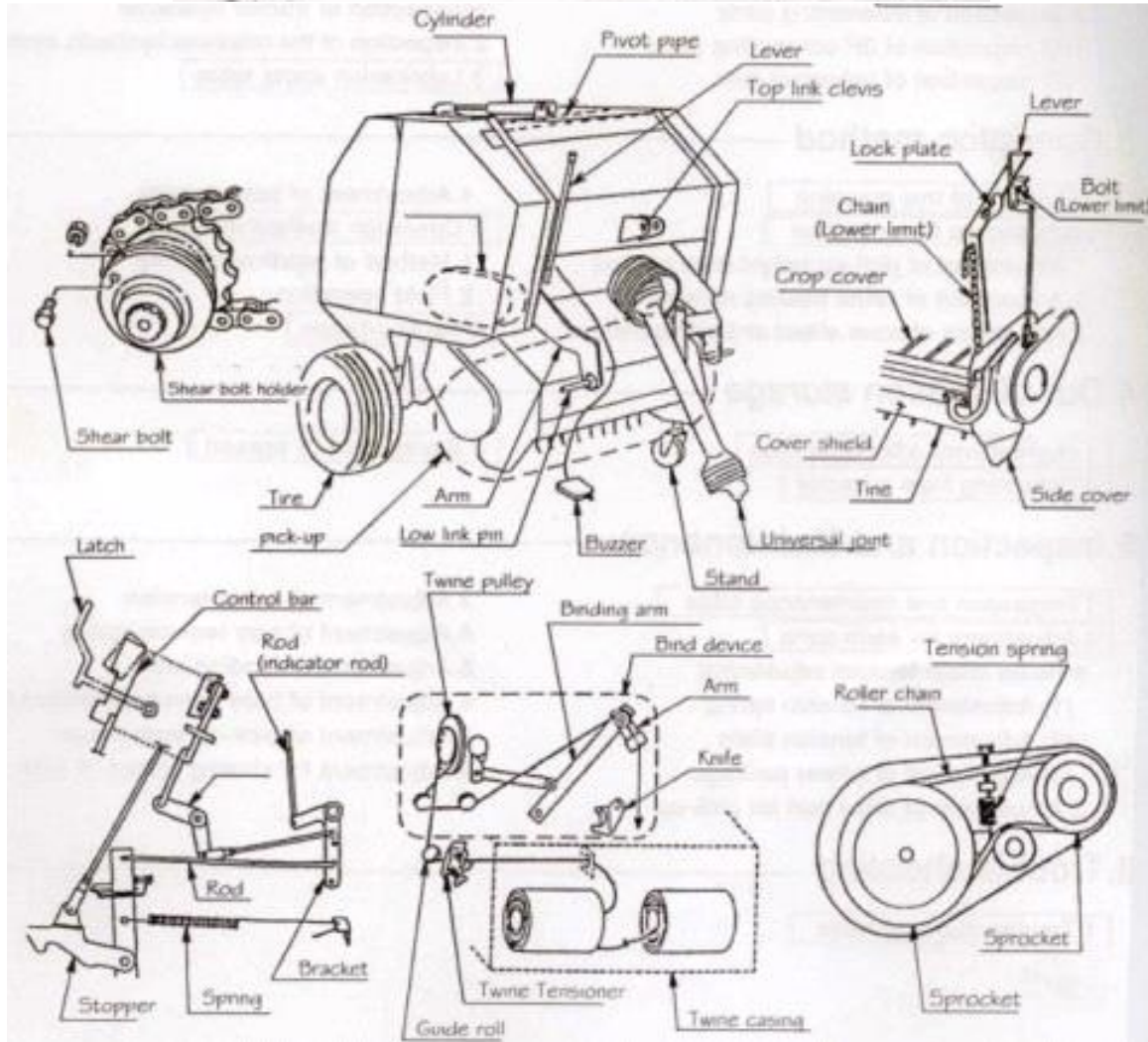
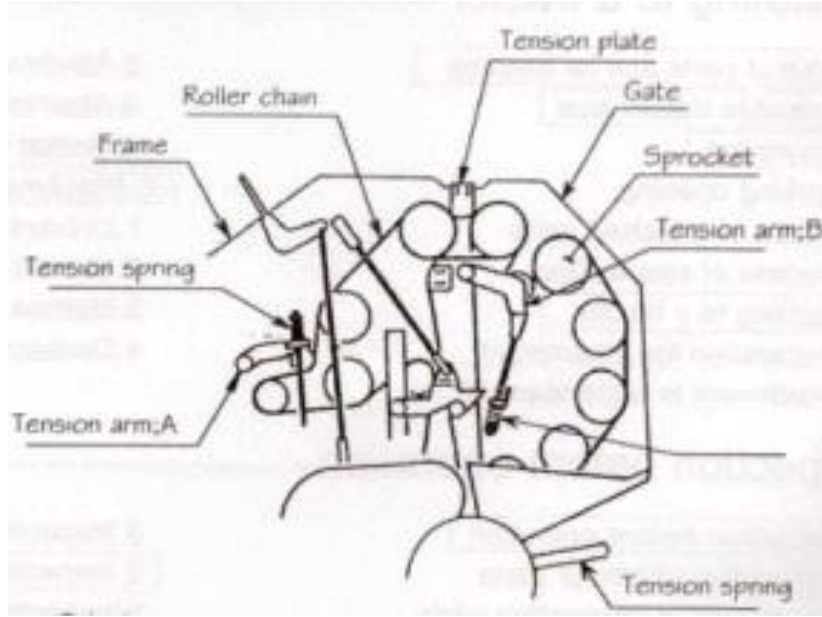
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6. Trouble shooting _____

1. **Trouble shooting table**

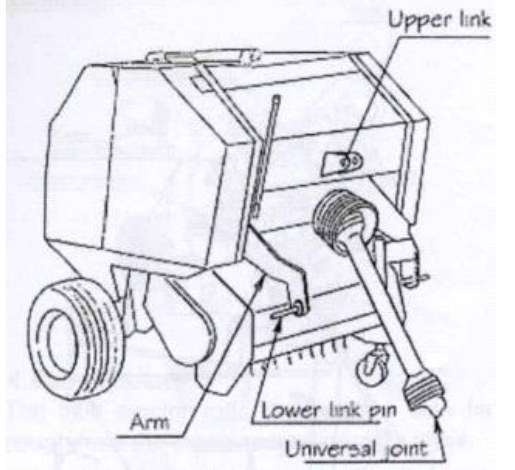
1. Attaching to a tractor

Name of parts and function



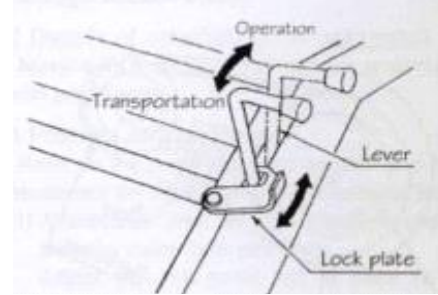
1. Lower link pin and upper link

Lower link pin and upper link are connected with the tractor lower links and top link.



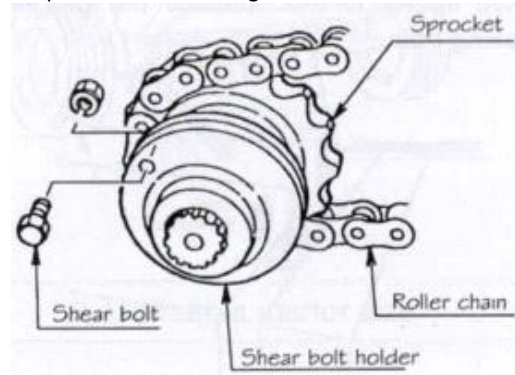
4. Lever and lock plate

The pick-up is lifted and is held by the lock plate for transportation of the Baler. The pick-up is lowered by releasing lock plate.



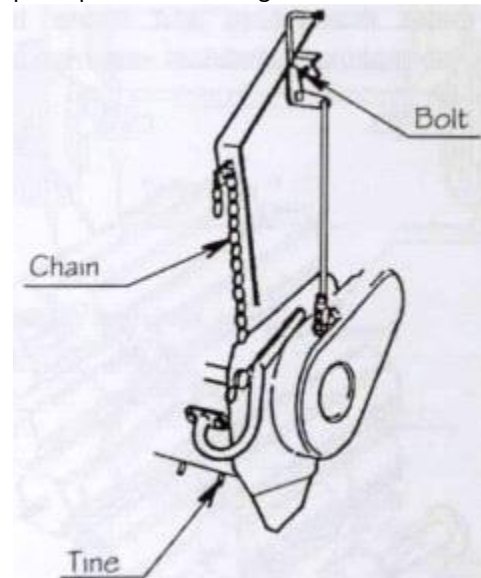
2. Shear bolt

shear bolt is broken when there is an overload affecting the drive system this prevents extra damage to the Baler.



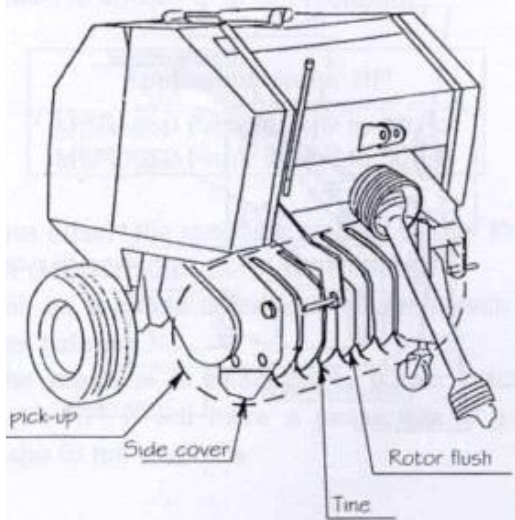
5. Chain and bolt (lower limit)

The chain and bolt limit the height of pick-up tines from the ground.



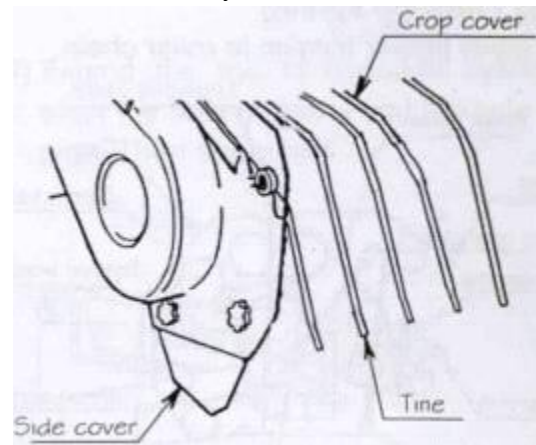
3. Pick up

The pick-up is operated to grab baling material from the ground.



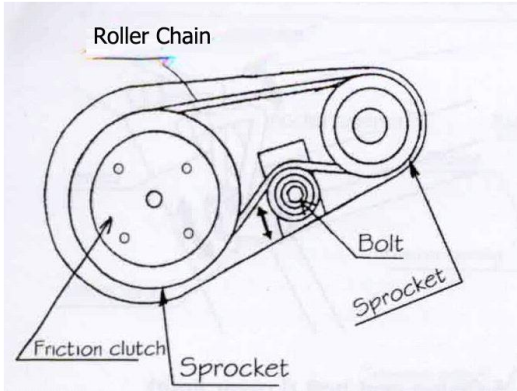
6. Crop cover, Cover shield and Side cover

The crop cover helps to convey hay or straw smoothly to the chamber.



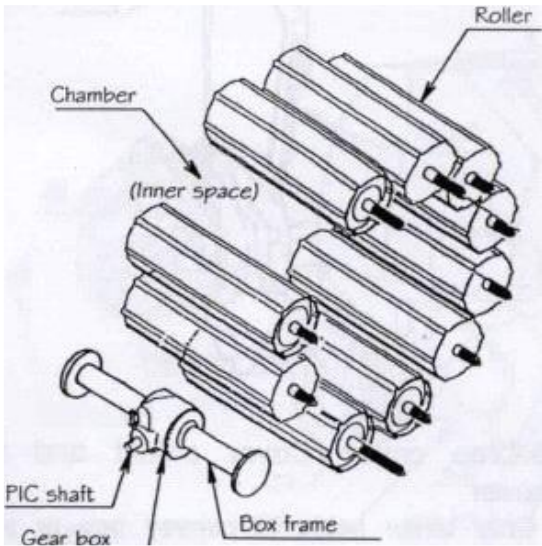
7. Roller chain and sprocket

The roller chain transfers the power to driver pick-up. The Friction clutch slips when an over load affects the pick-up, this is to prevent damage to the pick-up.



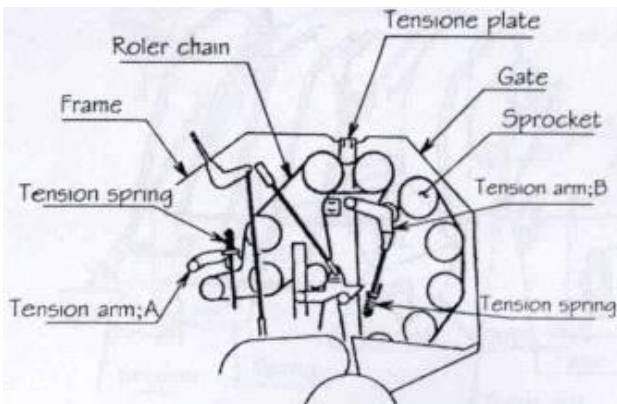
8. Chamber and roll

The chamber is formed by rolls. The rolls rotate themselves and rotate the material to make a cylindrical bale inside of chamber.



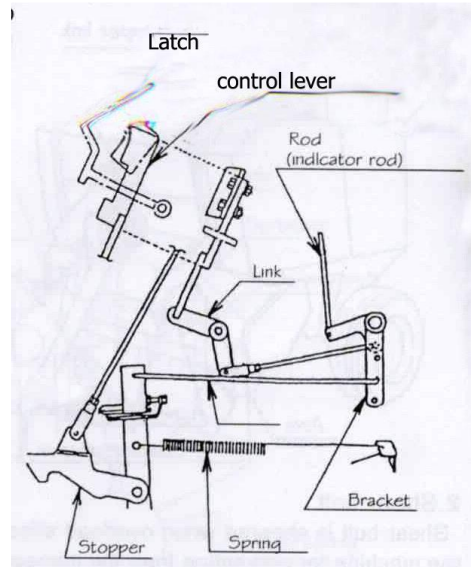
9. Spring (tension spring)

The spring gives proper tension to roller chain.



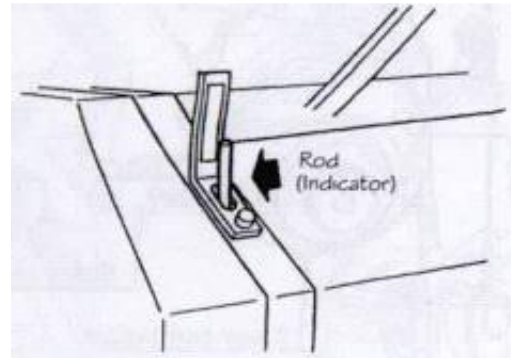
10. Rod and bracket

Bale density can be adjusted by changing the rod position into hole.



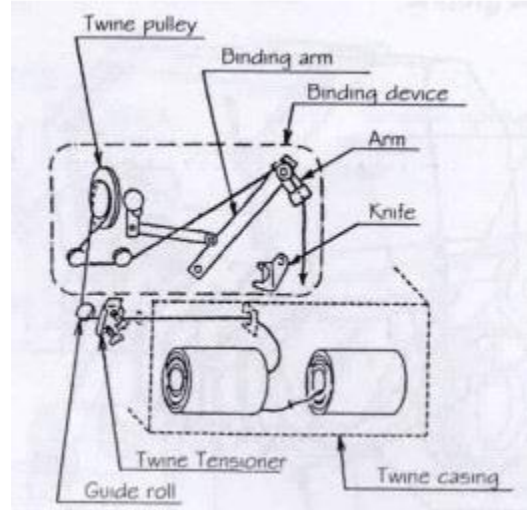
11. Rod (Indicator rod)

The rod shows the operator the progress of the bale being made.



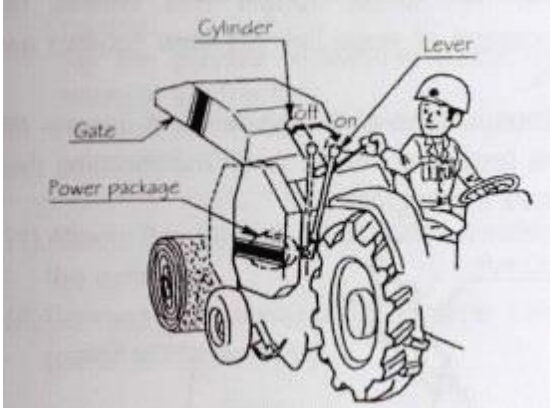
12. Binding device

The binding device winds twine onto a finished bale.



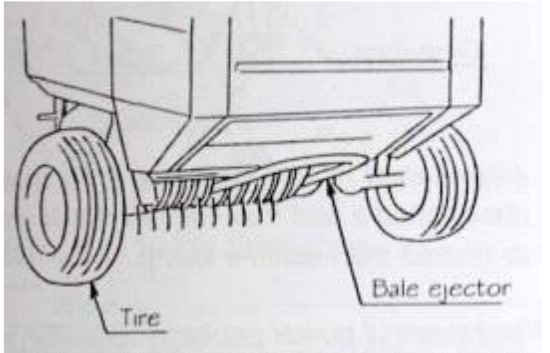
13. Hydraulic power package and lever

The hydraulic power system actuates the hydraulic cylinder to open and to close gate for bale dumping.



14. Bale ejector

The bale ejector rolls the finished bale far enough from the machine to allow the gate re-close.



3. Assembly

1. Package opening

Open the crate and remove the baler from metal frame.

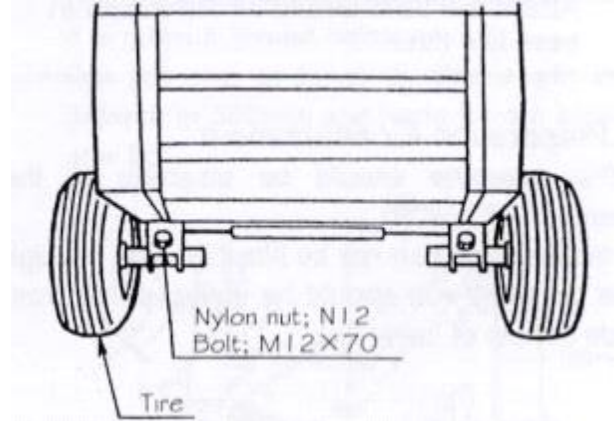
2. Details of attached parts

Make sure all parts are included in accordance with packing list.

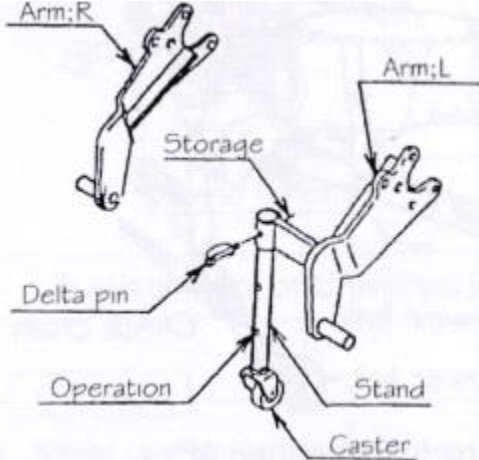
3. Process of assembling

Refer to the mark numbers on nuts and bolts necessary for assembling in the packing list.

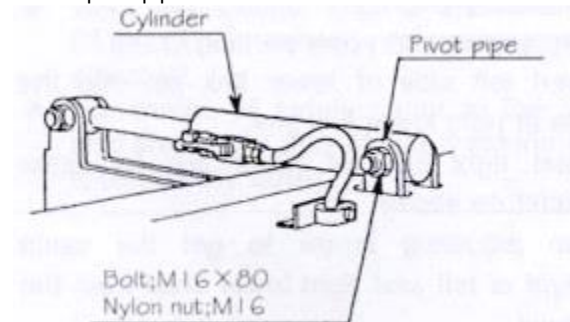
- (1) Attach the tires on the machine and fix them by nylon nuts and bolts. Adjust the tires so that the tread does not ride in the tractor wheel tracks.



- (2) Attach idler wheel to arm; L



- (3) Extend the rod of hydraulic cylinder and align the hole of barrel and the hole of pivot pipe. Then install bolt.



2. Applicable tractor size

This machine is designed to perform by attaching to a suitable size of the tractor. Using the wrong HP of tractor will affect operation.

RRF900 Mini Bale requires 18Hp – 50Hp

Never attach the baler to a smaller tractor than 18HP. It can be a cause of a serious accident due to lack of weight balance.

Attaching the baler to a tractor over 50Hp can do damage to the baler.

(4) Refer to parts list to install any other parts to the baler.

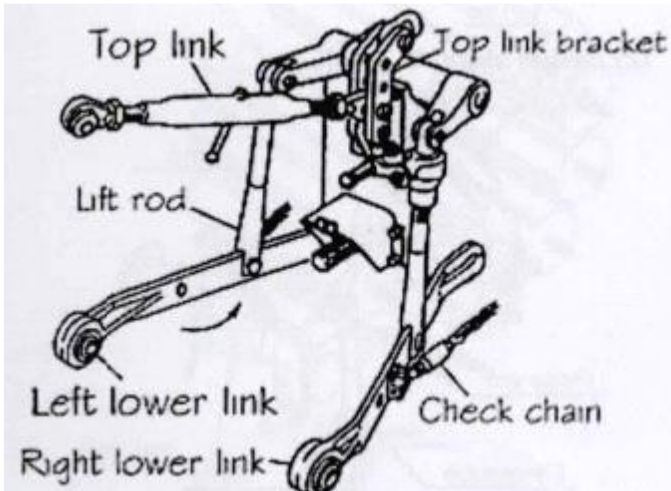
3. Attaching to a tractor

Warning

- Bystanders must keep safely distance when the machine is attached to the tractor or detached from the tractor.
- Attach the baler to the tractor or detach from the tractor on flat and solid ground.
- If the machine is attached to a lightweight tractor, there is a possibility of having unstable steering. Attach a front weight on the tractor for these cases.

1. Preparation for attachment

This baler should be attached to a standard 3PT tractor. If the baler can not be lifted up high enough, the pin of the lift rod should be inserted into front side of the hole of in the lower link.



2. Attaching to a standard 3PT

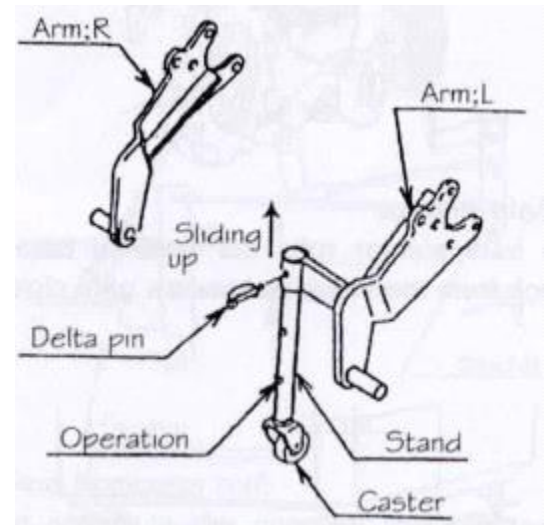
In accordance with following procedure.

- (1) Start engine of the tractor and drive the tractor in reverse until tips of lower link are aligned. Stop the engine and apply parking brake.
- (2) Insert left side of lower link pin into the hole in the right lower link. Insert right side of lower link by same procedure as above.
- (3) Turn adjusting screw to get the same height on left and right lower links from the ground.

4) If the width of lower link is not wide enough, adjust the link on the left side (look from the back).

(5) Lift the 3PT baler by the 3PT connection to get the 3PT frame upright, choose the position of main link pin then connect and secure.

(6) Start engine of the tractor and operate the oil pressure handle on the baler then stop the engine.

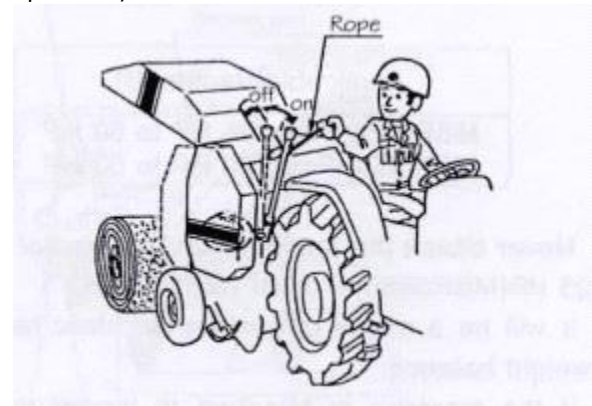


(7) Align the center of PTO shaft and PTO drive, press the safety and engage shaft until the safety pin catches and holds the shaft.

3. Attachment of power package operation rope Caution

Connect the operation rope to the tractor making sure that it cannot contact the PTO shaft but it needs to have enough slackness not to stretch when turning.

The breaking end of rope is fixed inside of driver's Cab (no effect to operation)



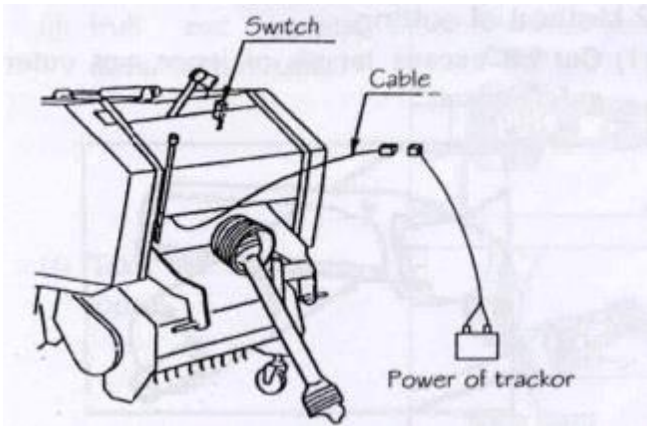
4. Attachment of buzzer

Caution

- Adjust the length of electric cable to get enough slackness to not stretch when turning. Tie the surplus of electric cable with a string or tape to the tractor. Turn off the switch when the machine is not used.

(1) Attach the buzzer at suitable position to be able to hear it.

(2) Connect with accessorial electric cable to power at the tractor (12V).



5. Method of twine threading

Warning

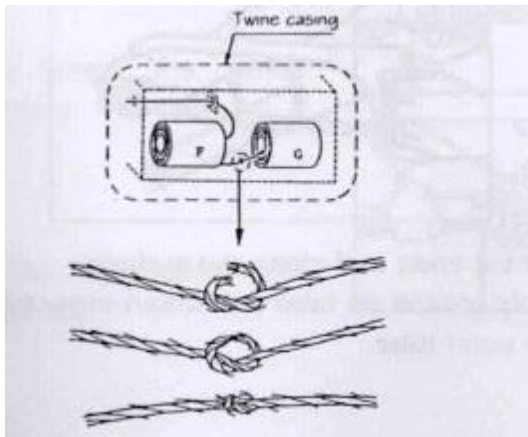
- Stop the tractor engine when twine is being threaded.

Caution

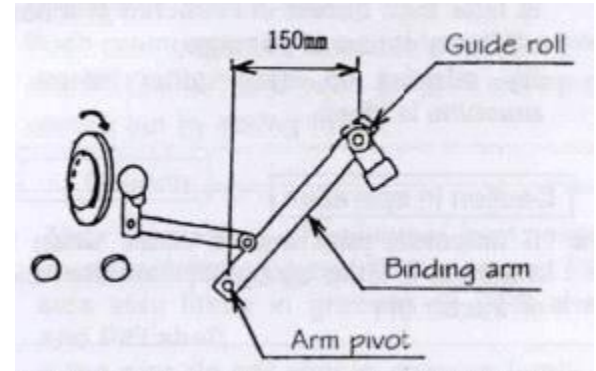
We suggest use only original jute twine. (8500 ft)
(Polypropylene 1100 feet can also be used)

(1) Can contain two twine spools in the twine housing.

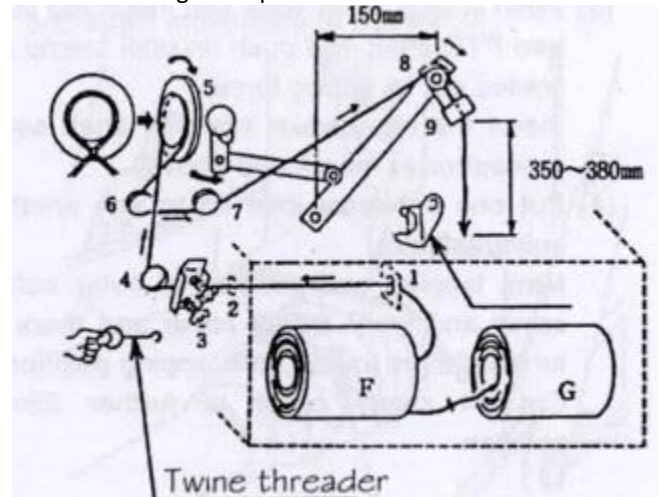
(2) Connect the end of roll with a G.Knot being made as small as possible.



(3) Turn the twine pulley in the direction of arrow until the binding arm moves from outside to inside and then stop turning at a horizontal distance 150mm between tip of binding arm and pivot.



(4) Thread twine tip in order from 1 to 9. Use attached twine threader in places where it is difficult to thread the twine. Cut the end of the twine leaving approximately 350mm to 380mm and hang it from binding arm tip.



5 Attachment of Universal joint (PTO Shaft)

Danger

- Never use universal joint with damaged safety cover or without safety cover.
- Inspect PTO shaft if damage is found on universal joint.
- Stop the tractor engine and disengage PTO when universal joint is being attached or removed.
- Fix chains of for safety cover to the tractor and stationery part of the baler not so that safety cover does not rotate.

Caution

- If the overlap length between the inner and outer tube of universal joint is less than 100mm in extended position, it can cause universal joint breakage.
- If the space between inner and outer tube is less than 25mm in retracted position, it can cause damage by pushing to itself when the baler is lifted.
- If universal joint makes noise when the machine is lifted up by 3PT, limit the height of tractor 3PT hitch.

1. Universal joint length check

(1) Pull out outer tube of universal joint from inner tube of universal joint.

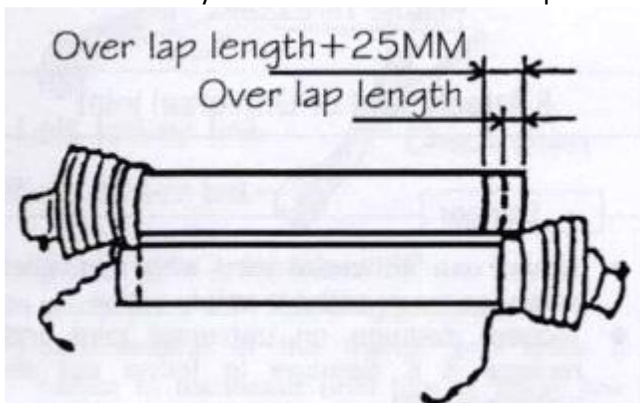
(3) Lift up the baler and stop the lifting when the shaft is at the point of the most compression.

(3) Push cramp pin of yoke and insert the yoke into PTO shaft and push on until cramp pin comes out by spring force.

Insert the other yoke into PIC shaft same procedure as above.

(4) Put one universal joint next to the other and mark the overlapping end position of outer safety cover and inner safety cover and mark at further 25mm inside from lapping position.

Cut off safety cover at the further 25mm position.

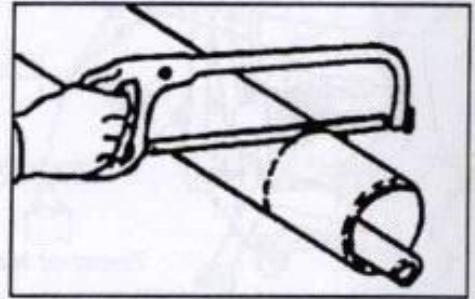


(5) Lift the machine and stop lifting at the most separated position between PTO shaft and PIC shaft.

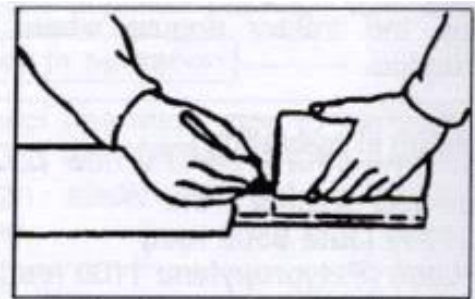
(6) Put one safety cover onto the other cover. If lapping length is less than 100mm, replace with a longer universal joint. (PTO Shaft)

2. Method of cutting

(1) Cut off excess length of inner and outer safety cover.

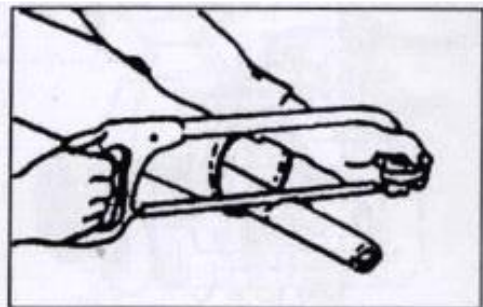


(5) Mark on inner and outer pipe the same length of cut off safety cover from the end of inner and outer tube.



(6) Before cutting off, put rag in between safety cover and pipe to protect from metal filings.

Cut off excess length of tube with a metal saw.



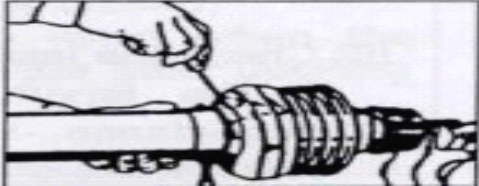
(7) File cut ends and clean the surface.

Apply grease on tube and insert inner tube into outer tube.

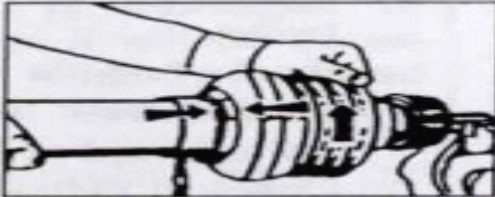
3. Method of outer safety cover removal

(1) Disassembly procedure of cover

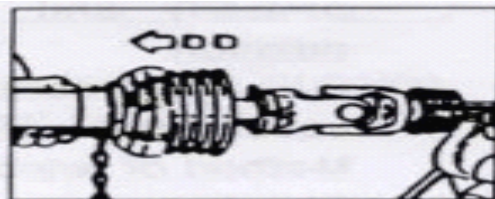
① Remove retaining screw.



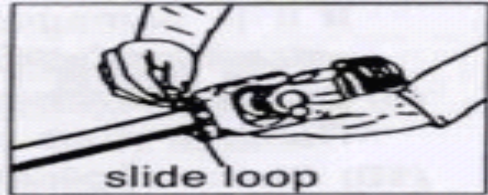
② Revolve the cover to until it releases.



③ Pull safety cover away from tube.



④ Take out the slide loop.

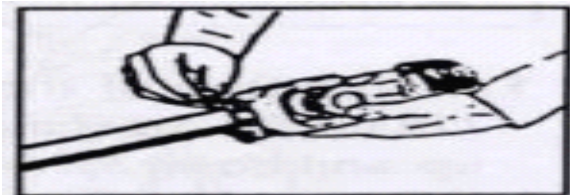


(2) Assembly procedure of cover

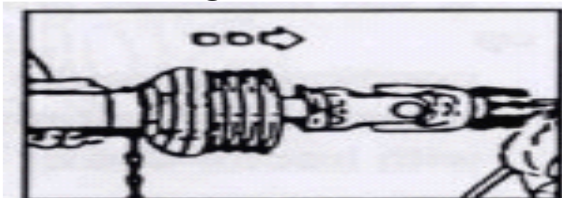
① Apply oil to slide loop channel and tube inside.



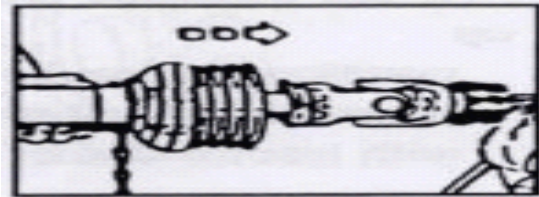
② Open the cut mouth of slide loop and embed it to the channel of tube.



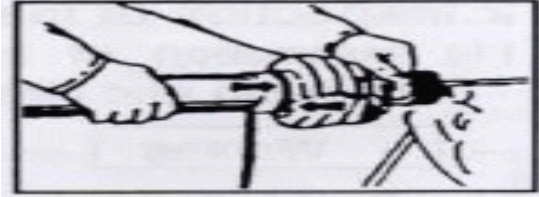
③ Fit the safety cover over u-joint.



④ Rotate cover to move it smoothly.



⑤ Fix the position with retaining screw.



4 . Connection of universal joint

(1) Connection to the baler

Push cramp pin of yoke and insert yoke into PIC shaft and push on until cramp pin comes out by spring force.

(2) Connection to the tractor

Push cramp pin of yoke and insert the yoke into PTO shaft and push on until cramp pin comes out by spring force.

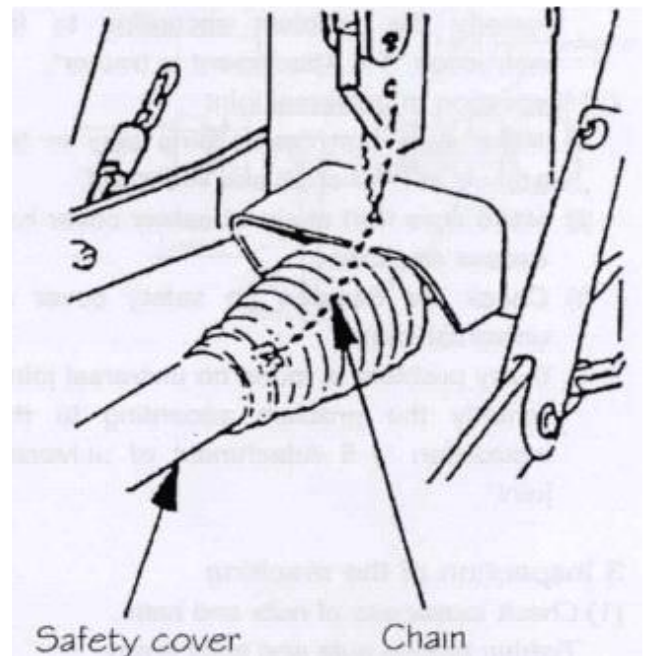
Caution:

After connection of universal joint, make sure that cramp pins of PTO side and PIC side stay firmly in grooves of PTO shaft and PIC shaft. If the pins do not stay in grooves firmly, it can cause a serious accident.

(3) Fix of safety cover chain

Fix safety cover chain on stationary part of tractor to prevent rotation of safety cover.

Slacken off chain so as not to stretch it in the up and down movement of tractor 3PT.



2 Inspection before operation

The following should be done before operation to extend the life of the baler.

1 Inspection before Operation

1. Inspection of the tractor parts

Inspect the tractor parts in accordance with operation manual of the tractor.

2. Inspection of connecting parts

(1) Inspection of 3PT connecting parts

- 1) Make sure that locking pin is inserted into the hole of low link pin.
- 2) Make sure that locking pin is inserted into a hole of top link pin.
- 3) Make sure that check chains of the tractor are stretched firmly.
- 4) If any problem is found in connection, remedy the problem according to the instruction "1-4 Attachment to tractor".

(2) Inspection of universal joint

- 1) Make sure that cramp pins stay in the groove of PTO shaft and PIC shaft.
- 2) Make sure that chain of safety cover has excess slackness.
- 3) Check the damage on safety cover of universal joint.
- 4) If any problem is found on universal joint, remedy the problem according to the instruction "1-5 Attachment of universal joint".

3. Inspection of the machine

- (1) Check tightness of nuts and bolts.
Tighten loose nuts and bolts firmly.
- (2) Check if the shear bolt is broken.
If it is sheared replace to new one.
Always prepare and have replacement shear bolts.
- (3) Check that roller chain is properly tensioned.
Adjust it in accordance with the instruction "5-2-1 Adjustment of roller chain tension".
- (4) Check the length of pick up tension if the length is improper, adjust the length in accordance with the instruction of "5-2-2 Pick-up V-belt tension adjustment".

(5) Check the length of twine tensioner.

If the length is improper, adjust it in accordance with the instruction "5-2-3 Adjustment of twine tensioner".

(6) Check the sharpness of binding knife to cut twine.

If it there a problem, solve it in accordance with the instruction "5-2-5 Adjustment of binding knife".

(7) Check if twine roll is long enough, twine is threaded properly and binding arm is in proper position.

If any problem is found, solve it in accordance with the instruction "1-4-4 Method of twine threading".

(8) Check damage of tine and fotor flush.

If it is damaged, replace it to new one by referring to parts list.

(9) Check for stuck hay or straw in the Baler.

Remove stuck crop from the machine.

(10) Check application of oil and grease.

If it is not applied properly lubricate in accordance with the instruction "2-3 Lubrication spots table".

(11) Check it tire air pressure is sufficient.

If it is insufficient, apply air until the pressure reaches 28 Psi.

2 Inspection in tractor engine running

1. Inspection of the tractor hydraulic

Lift up the baler by the control lever for lifting the 3PT up and down on the tractor.

If the baler stays in the up position, hydraulic system has no trouble. If hydraulic system does have any issue, contact with tractor dealer to solve the problem.

2. Inspection of machine hydraulic system

(1) Inspection of baler hydraulic system for gate opening and closing.

Warning

Bystanders must be away from the baler when the gate is opened.

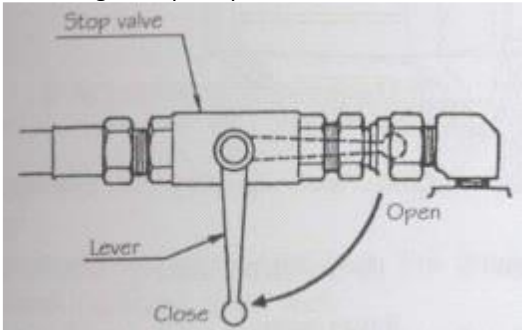
Lock the gate open with the stop valve when the checking inside the gate opening.

Caution

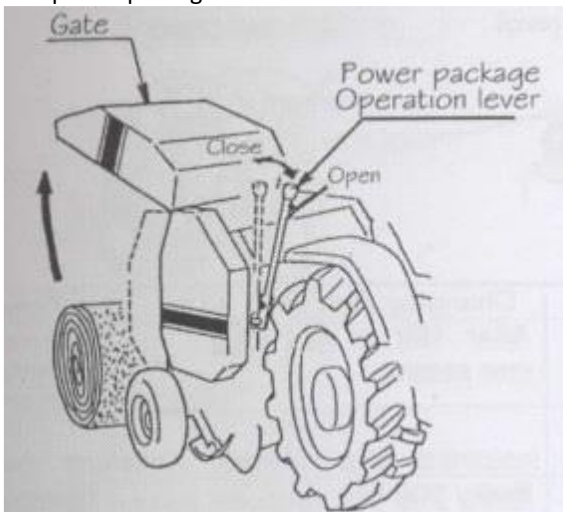
If the hydraulic hose is damaged or hydraulic fitting is loose, it can cause injury by leaking high pressure hydraulic oil or sudden dropping of the gate.

Replace damaged hydraulic hose or fittings and tighten loosen fittings.

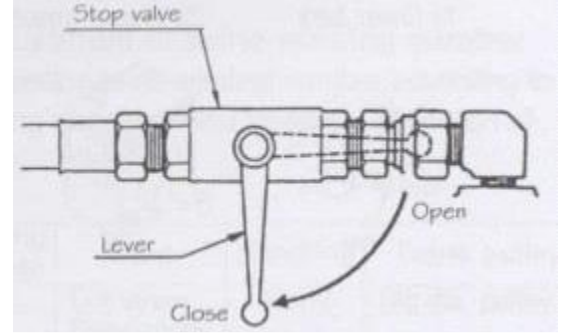
- 1) Turn lever of stop valve for gate opening and closing to "Open" position.



- 2) Start the tractor engine and engage PTO to rotate PTO shaft and then open gate by operating lever of power package.

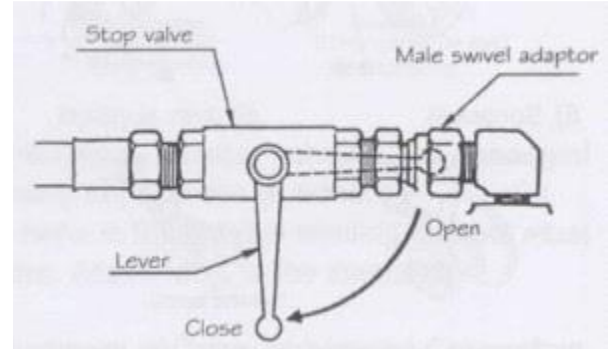


- 3) Turn lever of stop valve to "closed" while pulling the lever of the power package at fully opened gate position.



- 4) If the gate does not come down, everything is working properly. If the gate comes down, check for oil leakage and repair or replace damaged part.

- 5) Close the gate by slowly turning the stop valve lever to "Open" direction. If air remains in the hose or cylinder, loosen male adaptor slightly and let the air out it. Tighten swivel adaptor after releasing air.



3 Lubrication spots table

- Apply only fresh and clean oil and grease the machine.
- Apply grease to the grease nipple until old grease comes out.

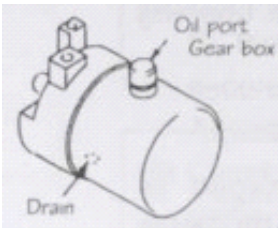
1) Gear box



2) Worm gearbox



3) Power package



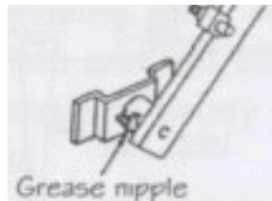
4) Housing



5) Sprocket



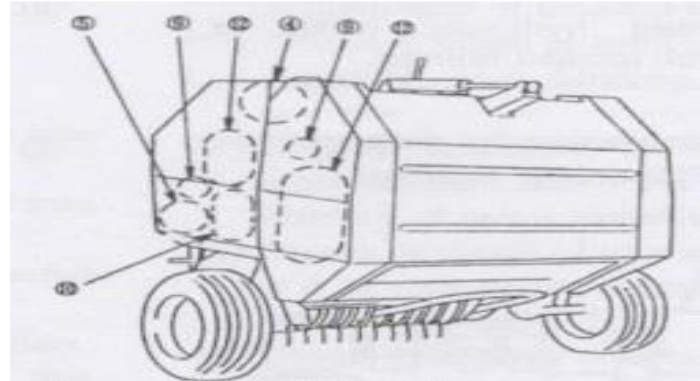
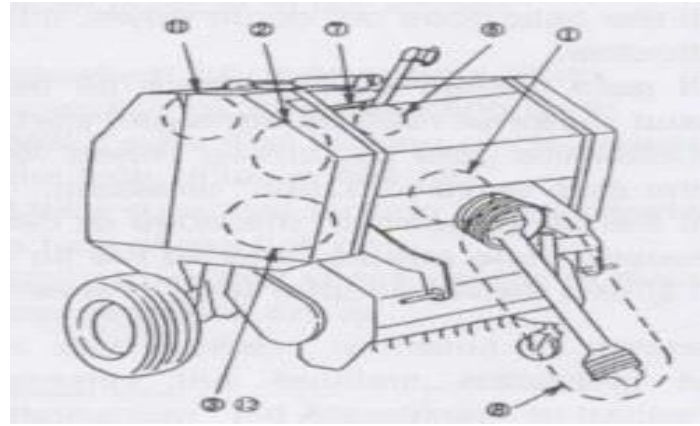
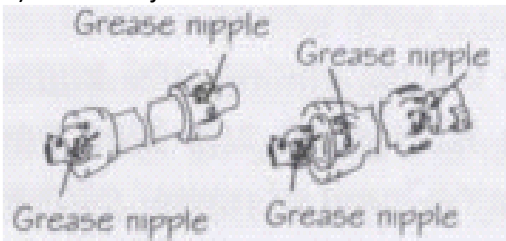
6) Arm support



7) Crank bar



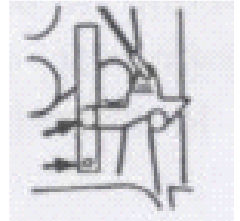
8) Universal joint



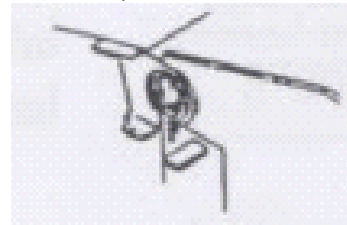
9) Tension arm pivot



10) Link pivot



11) Gate pivot



12) Roller chain



No.	Lubrication Points	Point	Kind of Lubrication	Changing Time	QTY	Remarks
1	Gearbox	1	Gear Oil Sae 90 API GL-5	100 hours or Season	500g	Drain Gearbox and clean before refilling
2	Worm Gearbox	1	Gear Oil Sae 90 API GL-5	100 hours		
3	Power Package	1	Gear Oil Sae 90 API GL-5	100 Hours	1.7L	Tank on gearbox
4	Housing	2	Grease: No. 3	Every Operation		Grease Nipple
5	Sprocket	1	Grease: No. 3	Every Operation		Grease Nipple
6	Arm Support	1	Grease: No. 3	Every Operation		Grease Nipple
7	Crank Bar	2	Grease: No. 3	Every Operation		Grease Nipple
8	Universal Joint	-	Grease: No. 3	Every Operation		Grease Nipple
9	Tension Arm Pivot	2	Oiling	Every Operation		
10	Link Pivot	4	Oiling	Every Operation		
11	Gate Pivot	2	Oiling	Every Operation		
12	Roller Chain	4	Grease Application	Every Operation		

3 Operation method

1 Purpose of this machine

1. This machine is produced for baling grass, rice straw and straw only.

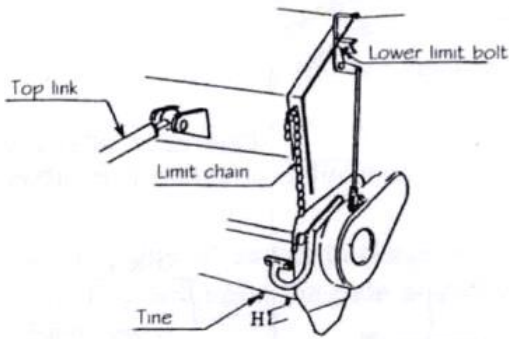
- (1) Bale hay which is less than 20% moisture content.
- (2) Bale grass for silage which is between 50% and 60% of moisture content.

2. Do not operate the baler directly after rain in muddy fields. Operate the baler in dry fields.

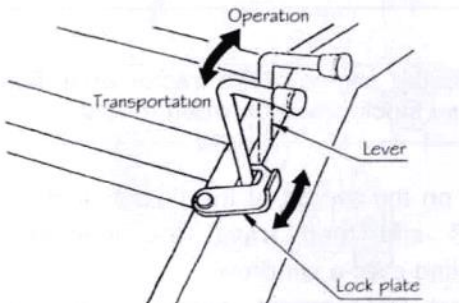
2 Adjustment for operation

- 1. Adjustment of pick-up tine height from the ground
 - (1) Adjust pick-up tine height from the ground by limit chain and lower bolt. Fine adjustment is done by top link pin of a tractor.

Baling material	H
Cut straw	0 mm
Long straw or hay	20mm



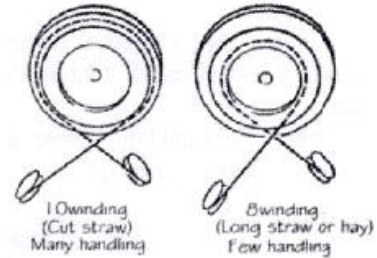
(2) Select operation position and transport position by moving the lever and lock plate.



2 Adjustment of twine winding number

Adjust the twine winding number according to baling condition and handling condition of bale.

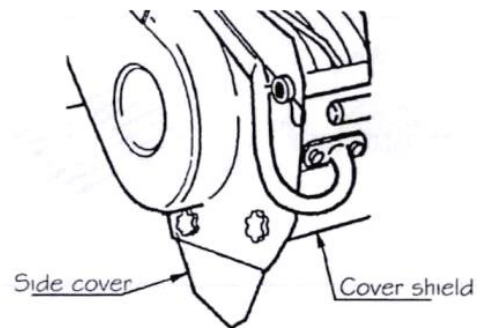
Winding number	Crop	Handling	Twine pulley
10	Cut straw	Many	Big dia. Pulley
8	Dried straw	↓	Small dia. pulley
	↑	↑	
	Hay	Few	
	Long straw		



The winding number should be changed according to thickness of twine. If the twine is thicker, the winding number is higher. The above table is the standard.

3. Adjustment of Cover shield and Side cover

Crop	Cover shield/ side cover
Cut straw	Attachment
Hay, Long straw	Removal



4. Adjustment of the bale density

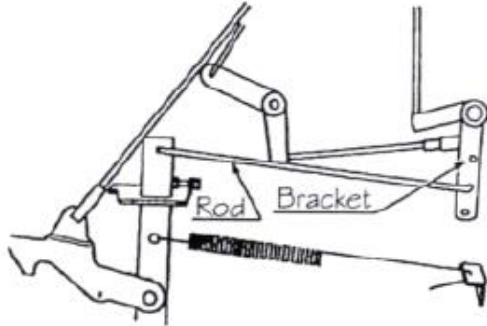
• Caution

- High density of bale requires high tractor PTO horse power. Adjust bale density according to the tractor size, the field condition and the baling material.

(1) Adjustment of the rod

When the rod is inserted into higher position of bracket hole, lower density of bales are made.

When the rod is inserted into lower position of bracket hole, higher density of bales are made.



(2) Adjustment by traveling speed lower traveling speed make higher density of bale.

Adjustment the traveling speed according to condition of the operation.

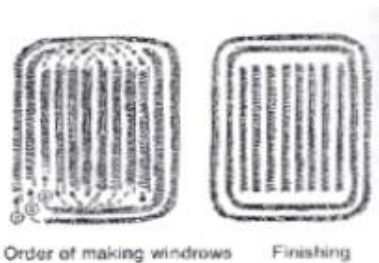
3 Operation method in field

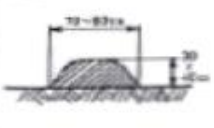


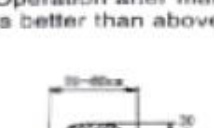
1. Method of windrow making

Make windrow of the width from 70 cm to 80cm and the height from 30cm to 40 cm as

Uniformly as possible.

The windrows which are made for efficiency and smooth operation are recommended.



Hay	Long rice straw (straw)	Operation by dropper of 2 rows rice combine harvester	Cut straw
Make windrows as Below 	Straw chop off operation By 3/4 rows rice combine harvester 	Operation by dropper of 2 rows rice combine harvester 2 rows direct drop Operation by dropper 	Direct straw pick up is Possible 
			Operation after making is better than above.

1. Field operation

- Warning**

 - Bystanders must be away from the machine when pick-up is running. Stop the tractor engine when taking away Stuck baling material from the pick-up.
 - Never touch rotating rollers.

Stop the engine of the tractor when taking away stuck grass between rollers.

(1) Put on the switch for the buzzer and engage PTO and then move the baler over a windrow. Adjust PTO speed depending on baling material condition and the moisture content of it.

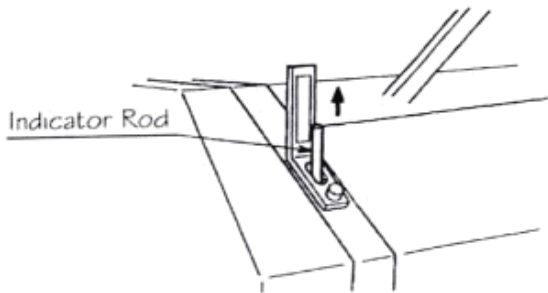
Baling material condition * Moisture content	PTO speed
Standard	540 rmp
Dried* short	350-450 rpm
Moist* stuck pick-up	540-600 rpm

Normal operation speed is 3-5 km/hr. Adjust the operation speed depending the field condition.

Caution in operation

- Do not stop PTO while twine is binding round on a bale

(2) The size of the baling material inside of the chamber is shown by the indicator. The indicator rod rises up when a bale is coming to full size.

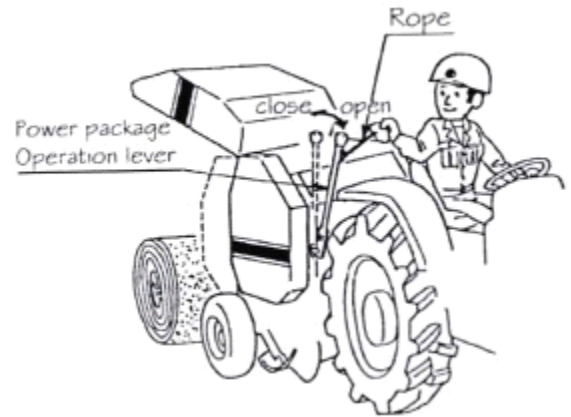


(3) When a bale reaches to complete, buzzer sounds and twine binds on a bale automatically.

Caution in operation

- If the twine binding will not start, forward about 1m.

(4) When the twine binding is finished, the twine is cut and binding stops. Pull the rope for power package while PTO is running and open the gate and then eject a bale.



• warning

- Bystanders must be away from the machine when the gate is opened.
- Do not eject a bale at inclined field. Eject a bale always level field.

(5) Return lever of power package after bale ejection to close gate and then start the operation.

4 transportation

- Stop PTO of the tractor
- Pull down the lever and lock it by lock plate.
- Switch off the buzzer.
- Lift up the machine by operating 3P lifting lever.
- Lock 3PT of the tractor not to come down the machine in the transportation.

4 Out of season for storage

Do regular maintenance to maintain a longer machine life.

- Caution

- Never try to remove blocked material when the machine is running. Disengage clutch of PTO drive, stop tractor engine and make sure all moveable parts stop.

1 Maintenance after operation

1. Remove baling material form pick-up in the field.
2. Remove piled dust from the binding unit.
3. Remove baling material stuck material on the rolls.
4. Remove dust from driving device in the side of the machine.
5. Replace damaged or worm parts to new ones.
6. Inspect driving and connection parts in accordance with inspection spots table.
7. Lubricate in accordance with lubrication spots table.
8. Apply grease on PTO shaft, PIC shaft, power joint and other parts which are not painted to prevent from the rust.
9. When machine and tractor separate, column should be set down.
10. After machine and tractor separate, universal joint should be detached.

2 Detaching from tractor

1. Slid down stand and insert pin into the highest position of a hole.
2. Lower hydraulic control lever of a tractor until tires of the machine contact with the ground.
3. Stop the tractor engine and apply parking brake.
4. Detach power joint from the tractor PTO shaft.
5. Detach right side of lower link, left side of lower link and top link.

3 Storage in out of season

1. Clean every part of the baler.
2. Inspect moving parts and connecting parts in accordance with inspection and maintenance points table.

If any damaged or worn parts are found, they must be replaced with new ones.

3. Apply grease or oil in accordance with lubrication points table.

Apply oil to rotating, pivoting parts and sliding parts such as clump pin of power joint.

Apply grease on PTO shaft, PIC shaft and spine holes of power joint yoke.

4. Paint or apply oil on damaged surface of parts to prevent from the rusting.
5. Store the machine in well ventilated indoor storage.
6. If there is no choice but to keep the machine outdoors, cover the baler with a plastic sheet or good quality tarp.

5 Inspection and maintenance

Inspection and maintenance should be done regularly to obtain good condition.

Inspect and maintain each part in accordance with inspection and maintenance table to prevent an accident related to poor maintenance.

Since tines, shear bolts, knives and twine are consumable parts, replace worn parts with new ones or replenish with new ones.

Warning

- Stop the tractor engine and disengage PTO when adjustment of twine binding device is done.
- Lock stop valve for fixing gate when inspection or adjustment is done at opening gate.

Caution

- Lock the hydraulic circuit of tractor when the baler rear hatch is raised up for maintenance or for inspection to prevent the hatch from falling down.
- Inspection or maintenance should be done on solid ground or concrete.

Never inspect or maintain on slanted, uneven, or soft ground.

- Stop the tractor engine and make sure all baler parts stop when inspecting.

Hours	Items for checking	Remedy
After initial 1 hour operation	Looseness of all nuts and bolts Slackness of roller chains	Tightening Adjustment in accordance with "5-2-1 Tension adjustment of roller chain"
Before operation After operation (or before operation)	Cleaning up Wear of pick up tines Wear of binding knife Shear of shear bolt Twine consumption Running out of battery cell for buzzer Tires air pressure Looseness and loss of nuts, bolts and pins Abnormal noise or vibration in driving Breakage of power safety cover of roller chain cover Lubrication to rotating and moving parts Adjustment of each parts	Replacement Replacement Replacement / Replenishment Replenishment Replacement (Layer • built cell ba. ttery 9V; 6F22) 1 95kPa(2. 0kg / cm2) Tightening and replenishment Remedy in accordance with trouble shooting table 6-1 Replacement Lubrication in accordance 2—3 Lubrication points table Adjustment in accordance 5-2 adjustment of each pads
Out of season	Broken parts Worn parts Cleaning up each parts Damage of painting Worn pivoting pads or pins	Repair Replacement with new one Painting or applying oil Replacement to new ones

2 Adjustment for parts

1. Roller chain tension adjustment

If roller chain is stretched by usage over time, adjust tension of roller chain so that it can continue transmitting the power smoothly.

Since the roller chain stretches after initial usage, adjust tension after the first use of baler.

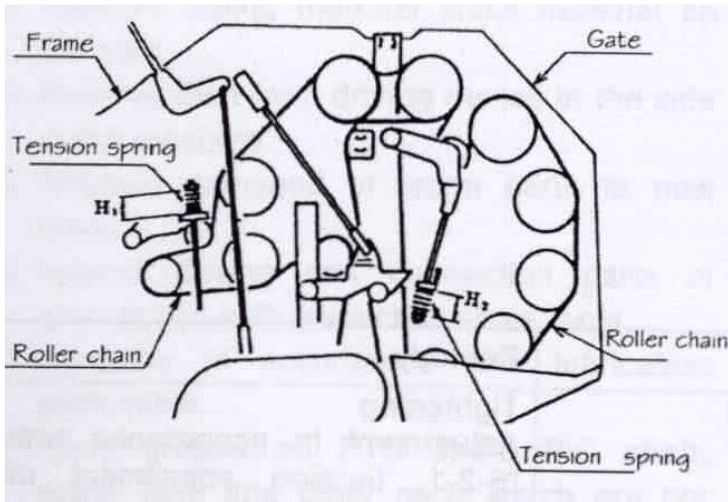
(1) Adjustment of tension spring

Adjust tension of roller chain on frame and on gate by adjusting the length of the tension springs.

The length of spring is on a decal which is stuck on the machine.

H1=36mm

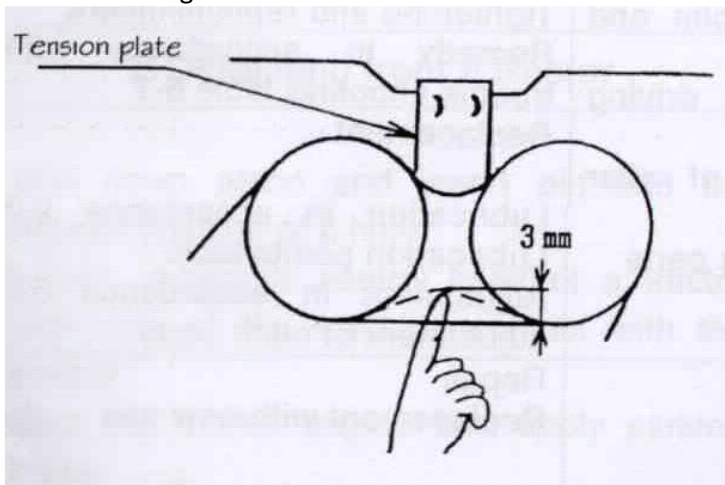
H2=38mm



(2) Adjustment of tension plate

Adjust tension of roller chain between frame and gate by tension plate.

Proper roller chain tension gives 3mm deflection when roller chain is pushed by a finger.

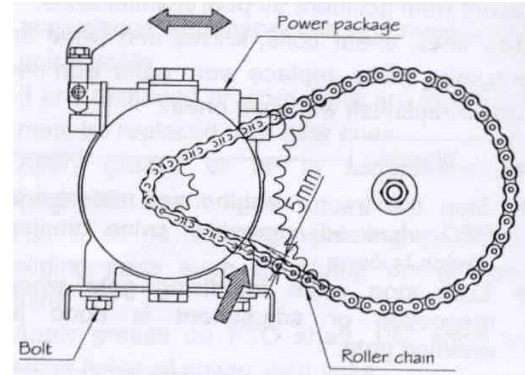


(3) Adjustment of power package

Tension for roller chain to drive the power package is adjusted by moving position of the power package.

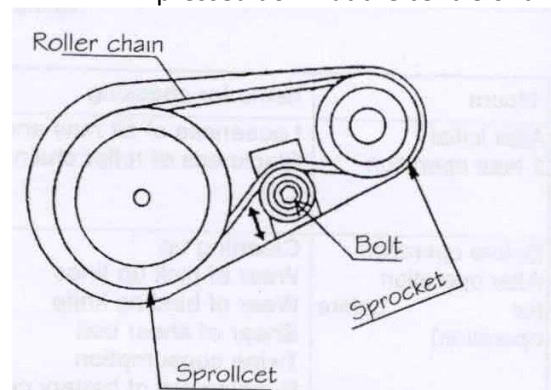
Push middle part of chain between both sprockets using a finger.

Correct tension is approx. 5mm of deflection when the chain is pushed.



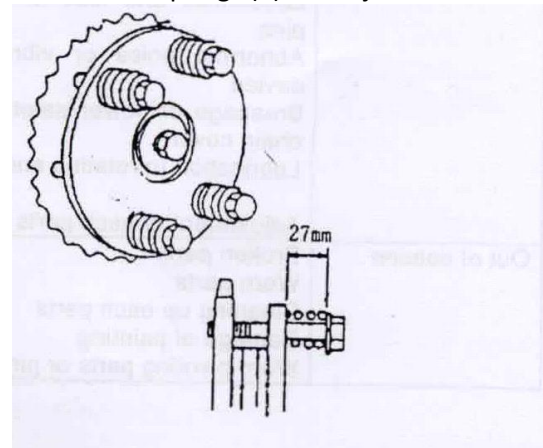
2. Adjustment of drive part for pickup

(1) Loosen bolt, revolve tension roll to adjust chain, after adjustment, fasten the bolt. The most suitable tension is 3mm pressed down at the centre of the chain.



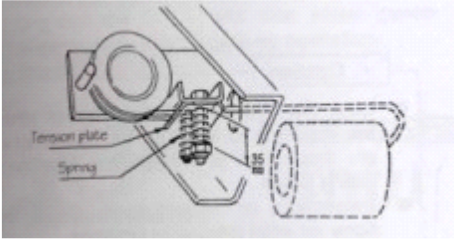
(2) Adjustment of sliding clutch

Springs (4) are adjusted to 27mm.



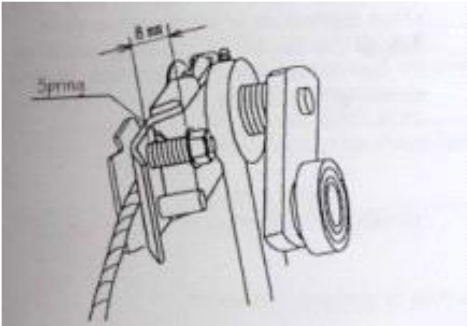
3. Adjustment of twine tension

Adjust spring length to 35mm



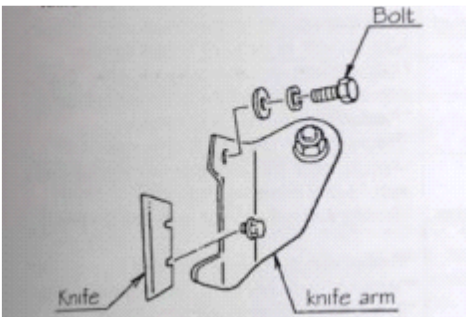
4. Adjustment of arm tension spring

Adjust length of the spring at 8mm



5. Adjustment of binding knife

Remove the knife and reverse if the knife is dull.
Replace the knife with a new one if both sides are dull.



Caution

Use only original equipment replacement knife for the baler.

6. Adjustment of the bale density detection link

- (1) Adjust the clearance between stopper and collar on gate by bolt.
 $L_1=1-2\text{mm}$ is proper.
- (2) Remove the fork end on the lower end of release rod and then pull the release rod to lower.

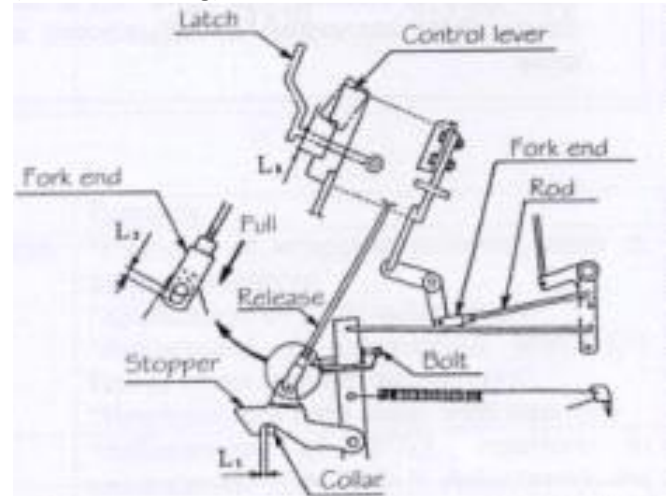
Adjust the dimension between lower side of fork end slot and the hole of stopper as mentioned below in above situation.

$L_2=2\text{mm}$ is proper.

(3) Adjust the dimension between latch and cutout of control bar as below.

$L_3=8\text{mm}$ is proper.

Adjust this dimension to $L_3=6\text{mm}$ if bale weight is heavy (More than 25kg) because of too much moisture content

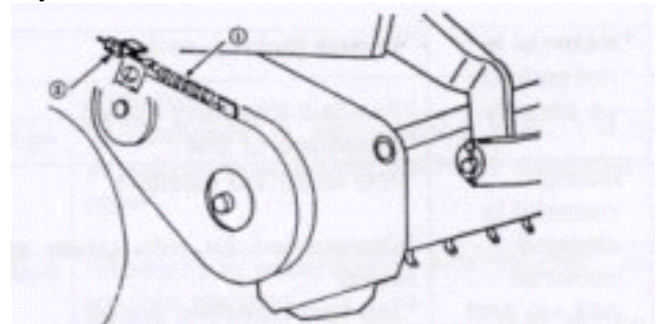


7. Adjustment of Pick-up suspension

Proper suspension springs length on both sides of pick-up is $L=48\text{mm}$,

Adjust spring length according to field condition if the pick-up does not follow the field unevenness.

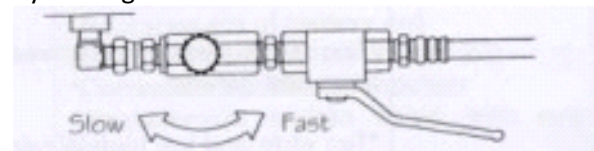
Both springs length should be the same after the adjustment.



8. Adjustment for closing speed of gate

Closing speed can be adjusted by turning the knob on the slow return valve.

Speed is decreased by turning it to the right or is increased by turning it to left.



6 trouble shooting

Adjust the baler in accordance with trouble shooting table if it is not work functioning properly.

Warning

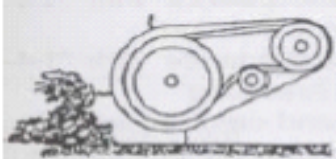
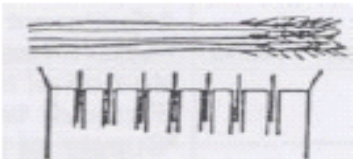
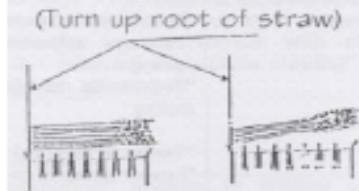
- * stop the tractor engine and disengage PTO when adjustment is done.
- * lock gate open by closing the stop valve when inspection or adjustment is being done.

Caution

- * lock the hydraulic circuit of tractor when the baler is lifted up for maintenance or inspection to prevent the baler from falling down
- * Inspection or maintenance should be done on solid ground or concrete only.
- Never inspect or maintain on slanted, uneven, or soft ground.
- * **Pick up**

- * Stop the tractor engine, disengage PTO and make sure all moving parts stop when inspection or adjustment is done.

Fault	Possible cause	Remedy
* Abnormal noise is made	<ul style="list-style-type: none"> * Breakage of tine * Breakage of rotor flush * Winding of hay or twine * Breakage of cam roller bearing * Insufficient V belt tension 	<ul style="list-style-type: none"> * Tine replacement * Rotor flush replacement * Remove winding material * Replacement of cam roller bearing * Adjustment in accordance with 5-2-2
* Material is not picked up cleanly	<ul style="list-style-type: none"> * Wrong pick-up setting * Travelling speed too fast * Breakage of tine 	<ul style="list-style-type: none"> * Adjustment in accordance with 3-2-1 * Reduction of traveling speed * Making windrow in accordance with 3-3-2 * Shorten top link for obtaining forward leaning machine position
* Baling material is clogged between pick-up and chamber.	<ul style="list-style-type: none"> * PTO rotation too fast * Obstruction by side cover and cover shield * Travelling speed too fast * Too wide and high windrow * Too much windrow not picked up 	<ul style="list-style-type: none"> Adjustment in accordance with 5-2-2 * Replacement of broken V belt with new one * Adjustment in accordance with 3-2-1 * Making windrow in accordance with 3-2-2 * Adjustment of cutting height for mower * Take out side cover and shield cover
* Pick-up does not rotate	<ul style="list-style-type: none"> * Wrong V belt tension adjustment * Breakage of V belt * Too much clearance between pick-up tines and ground * Too wide and high windrow * Mowing height too high from ground * Obstruction by side cover and shield cover 	<ul style="list-style-type: none"> * Adjustment in accordance with 5-2-2 * Replacement of broken V belt with new one * Adjustment in accordance with 3-2-1 * Making windrow in accordance with 3-2-2 * Adjustment of cutting height for a mower * Take out side cover and shield

Fault	Possible cause	Remedy
* pick-up pushes long stem rice straw to forward 	*Matching of pick-up center and rice straw center in the pick-up operation. 	* Picking-up by right side or pick-up. 

*** Roller**

Fault	Possible cause	Remedy
* Roller makes abnormal noise	* Wrapping material or mud on roller or clogging material * Insufficient lubrication * Insufficient roller chain tension * Dent in roller	* Remove of wrapping material, mud or clogged material * Application Of oil to roller chain * Adjustment in accordance with 5-2-1 * Replacement dent roller with new one
* Material is winding On roller	* Too fast PTO rotation * Material clogging in pick up * Dent in roller	* Adjustment of PTO rotation in accordance with 3-3-2 * Remedy in accordance with "pick-up" trouble shooting * Replacement dent roller with new one
*Heat generate in Roller chain	*Too high bale density *Insufficient lubrication to roller chain *Insufficient roller chain tension	*Adjustment; n accordance with 3-2-4 and 5-2-6 *Application grease to roller chain 5-2-1

*** Buzzer**

Fault	Possible cause	Remedy
* Buzzer does not sound	* Switch off * Running out of battery cell * Wrong cable connection * Too much distance between switch lever and binding arm	* switch on * Replacement of battery cell * Correction of cable connection * Replacing broken cable with new one * Adjustment of switch location

*** Binding**

Fault	Possible cause	Remedy
* Binding does not work when bale is finished	<ul style="list-style-type: none"> * Binding is not set in correct initial position * Insufficient lubrication * Wrong adjustment of tensioner * Twine is coming off from twine pulley * Twine is tangled or caught * Lower density in bale left side * Binding arm does not rise up after coming off latch. * Twine tip does not come in chamber 	<ul style="list-style-type: none"> * Adjustment in accordance with 1-4-5. * Lubrication * Adjustment in accordance with 5-2-3. * Adjustment in accordance with 1-4-4. * remove tangle in twine * Supply of larger quantity of material to left side of the baler * Lubrication and adjustment of falling speed by double nuts. * Adjust falling down speed of twine arm not to be ahead of twine falling * Remove obstruction and let twine tip into chamber.
* Binding device engages before reaching setting density	<ul style="list-style-type: none"> * Binding is not set in correct initial position * Longer leading twine length because of dull knife 	<ul style="list-style-type: none"> * Adjustment in accordance with 1-2-4. * Replacement of knife and adjustment of leading twine length in accordance with 1-4-4.
<ul style="list-style-type: none"> * Twine comes off of bale * Twine is not cut smoothly 	<ul style="list-style-type: none"> * Smaller twine binding number * Twine tension is too loose 	<ul style="list-style-type: none"> * Adjustment in accordance with 3-2-2 * Tighten nylon nuts on twine tension plate one or two turns

*** Gate**

Fault	Possible cause	Remedy
* Bale does not come out	<ul style="list-style-type: none"> * Density too high density * Too wide windrow * Uneven Ground 	<ul style="list-style-type: none"> * Adjustment in accordance with 3-2-4 * Make windrow in accordance with 3-3-1 * Ejection of a bale in flat place
* Gate does not open	<ul style="list-style-type: none"> * Closing of stop valve * Leakage or breakage of hydraulic circuit * Wrong adjustment of locking hook * Disengagement of PTO * low power package oil level 	<ul style="list-style-type: none"> * Open of stop valve * Remedy in accordance with 2-2-2-1 * Adjustment in accordance with 5-2-6 * Engage PTO and eject bale while PTO is running. * Application of Oil in accordance with 2-3.

*** Shear bolt**

Fault	Possible cause	Remedy
* Shear bolt broken	* PTO speed too high * Clogged material in Pick-up * Winding material on pick-up * Loose shear bolt	* Operate in normal PTO speed * Remedy in accordance with "Pick-up" clause of trouble shooting * Remedy in accordance with clause 3-3-1

*** Universal Joint**

Fault	Possible cause	Remedy
* Abnormal noise is made	* Insufficient Lubrication * Too sharp of angle of universal joint	* Application grease to sliding pipes, spiders and mounting part of safety cover * Adjustment of tractor top link length, lower link stabilizer and lower link upper limit.