MACHINE SPECIFICATIONS

TRACTOR REQUIREMENTS:	
Horsepower	26 kW (35 hp)
Power TakeOff	540 rpm
Hydraulic Pressure to Lift Platform	13,790 kPa (138 bar) (2,000 psi)
MACHINE WIDTH:	
Transport	3.7 m (12 ft. 2.0 in.)
Operating	4.6 m (15 ft. 1.25 in.)
MACHINE LENGTH*:	
Transport	4.90 m (16 ft. 1.0 in.)
Operating	4.85 m (15 ft.)
MACHINE HEIGHT:	
Transport	1.7 m (5 ft. 8 in.)
Operating	1.3 m (4 ft. 3 in.)
MACHINE WEIGHT	1,725 kg (3,800 lb.)
PLATFORM:	
Cutting Height	32—152 mm (1.25—6.00 in.)
Width of Cut	3.0 m (9.0 ft. 9 in.)
Windrow Width**	0.9—2.3 m (34—90 in.)
Adjustable Gauge Shoes	Left and right (standard) Center shoe (optional)
TIRES	9.5 L-14, 6 Ply

continued on next page

**Measured from center of hitch pin hole.*

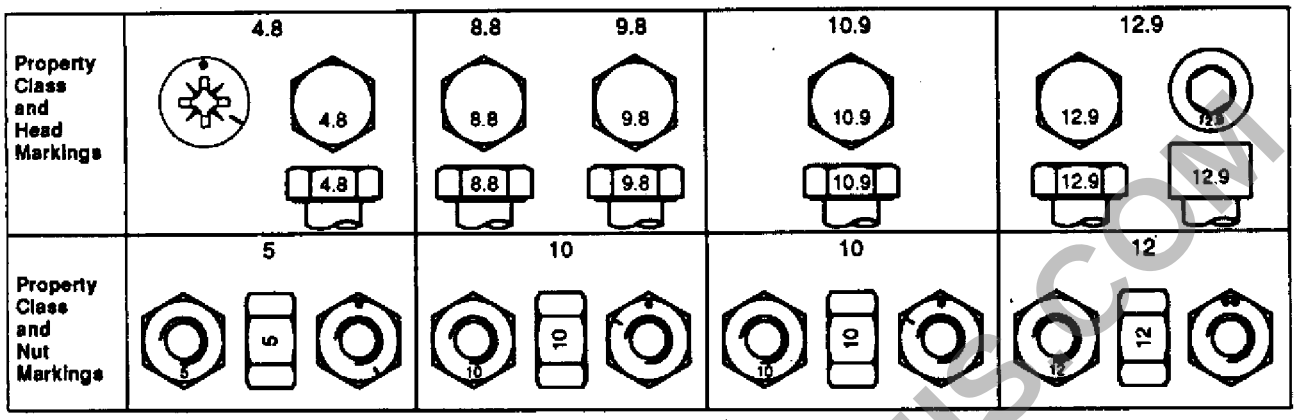
***Depending on crop conditions.*

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METRIC BOLT AND CAP SCREW TORQUE VALUES



TS1163 -19-04MAR91

Size	Class 4.8				Class 8.8 or 9.8				Class 10.9				Class 12.9			
	Lubricated[a]		Dry[a]		Lubricated[a]		Dry[a]		Lubricated[a]		Dry[a]		Lubricated[a]		Dry[a]	
	N·m	lb-ft	N·m	lb-ft	N·m	lb-ft	N·m	lb-ft	N·m	lb-ft	N·m	lb-ft	N·m	lb-ft	N·m	lb-ft
M6	4.8	3.5	6	4.5	9	6.5	11	8.5	13	9.5	17	12	15	11.5	19	14.5
M8	12	8.5	15	11	22	16	28	20	32	24	40	30	37	28	47	35
M10	23	17	29	21	43	32	55	40	63	47	80	60	75	55	95	70
M12	40	29	50	37	75	55	95	70	110	80	140	105	130	95	165	120
M14	63	47	80	60	120	88	150	110	175	130	225	165	205	150	260	190
M16	100	73	125	92	190	140	240	175	275	200	350	255	320	240	400	300
M18	135	100	175	125	260	195	330	250	375	275	475	350	440	325	560	410
M20	190	140	240	180	375	275	475	350	530	400	675	500	625	460	800	580
M22	260	190	330	250	510	375	650	475	725	540	925	675	850	625	1075	800
M24	330	250	425	310	650	475	825	600	925	675	1150	850	1075	800	1350	1000
M27	490	360	625	450	950	700	1200	875	1350	1000	1700	1250	1600	1150	2000	1500
M30	675	490	850	625	1300	950	1650	1200	1850	1350	2300	1700	2150	1600	2700	2000
M33	900	675	1150	850	1750	1300	2200	1650	2500	1850	3150	2350	2900	2150	3700	2750
M36	1150	850	1450	1075	2250	1650	2850	2100	3200	2350	4050	3000	3750	2750	4750	3500

DO NOT use these values if a different torque value or tightening procedure is given for a specific application. Torque values listed are for general use only. Check tightness of fasteners periodically.

Shear bolts are designed to fail under predetermined loads. Always replace shear bolts with identical property class.

Fasteners should be replaced with the same or higher property class. If higher property class fasteners are used, these should only be tightened to the strength of the original.

Make sure fasteners threads are clean and that you properly start thread engagement. This will prevent them from failing when tightening.

Tighten plastic insert or crimped steel-type lock nuts to approximately 50 percent of the dry torque shown in the chart, applied to the nut, not to the bolt head. Tighten toothed or serrated-type lock nuts to the full torque value.

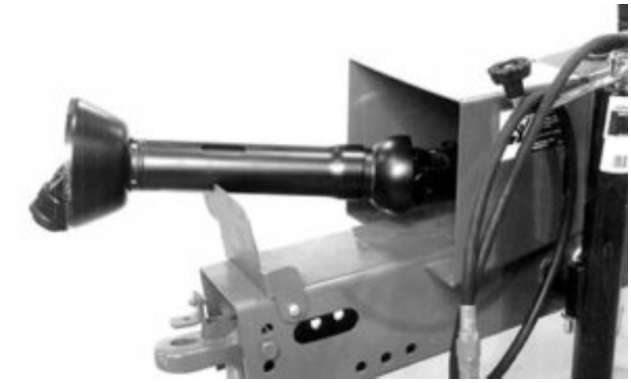
[a] "Lubricated" means coated with a lubricant such as engine oil, or fasteners with phosphate and oil coatings. "Dry" means plain or zinc plated without any lubrication.

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GENERAL INFORMATION





The PTO hookup is a low friction type. The low friction type can be identified by removing front section and noting a smooth rectangular shaft (A).

The tractor disconnect used on the hookup is a ball and sliding collar type. The sliding collar provides a fast and easy way of connecting and disconnecting the hookup to and from the tractor.

The tractor disconnect yoke is equipped with six splines for 540 rpm PTO operation.

CAUTION: Never connect a 540 rpm mower-conditioner to a 1000 rpm tractor.

The PTO operating speed of the tractor and mower-conditioner must be the same.

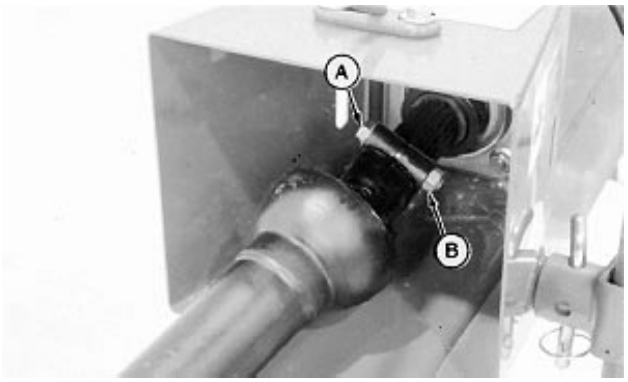
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REPAIR PTO HOOKUP

1. Remove PTO hookup from storage position and allow it to rest on tongue.

IMPORTANT: Whenever lock nut (B) is removed, discard and replace with new lock nut.

2. Remove cap screw (A) and lock nut (B) to remove PTO hookup. Discard lock nut.

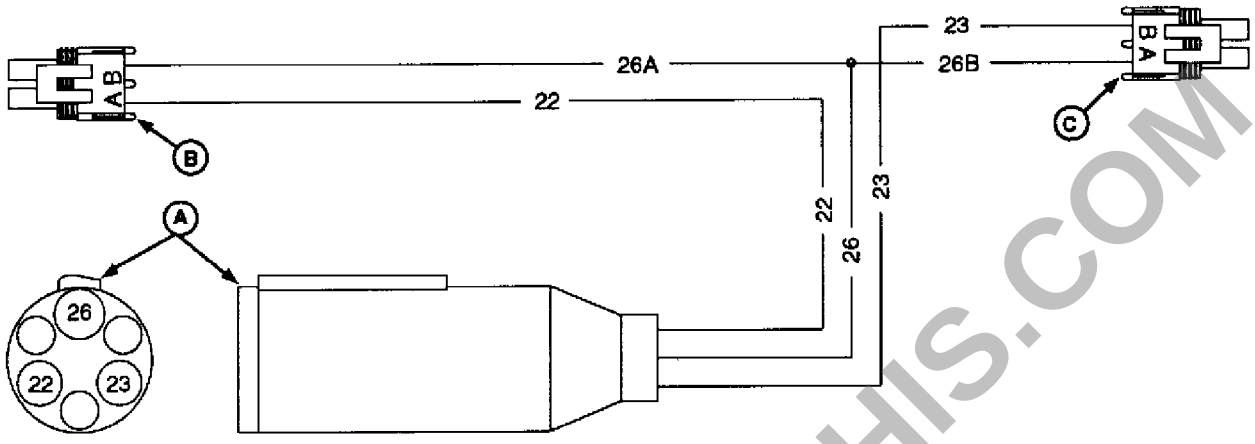


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WARNING LIGHTS



E37838 -UN-28FEB94

A—Tractor Outlet
B—Left Warning Light
C—Right Warning Light
22—Green Wire (Left Light)
23—Yellow Wire (Right Light)
26—White Wire (Ground)
26A—White Wire (Ground)
26B—White Wire (Ground)

The warning lights provide four way hazard lights, and right or left turning lights.

The system connects to the tractor with a standard seven terminal outlet socket.

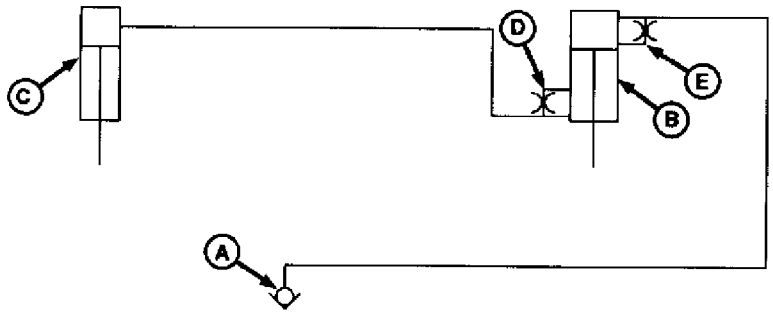
The system is simple in design and should not present any difficulties in diagnosing or repairing a system malfunction.

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PLATFORM LIFT CYLINDERS OPERATION



E37839 -UN-28FEB94

A—Hose Couplers
B—Master Cylinder
C—Slave Cylinder
D—Phasing Orifice
E—Phasing Orifice

Platform lift is controlled by tractor hydraulics. Oil from tractor hydraulic outlet (A) operates the single acting master cylinder (B) and slave cylinder (C) to raise the machine. A phasing orifice (D) on the rod end of the master cylinder allows the slave cylinder to fully extend when the tractor SCV lever is held in the extend position. The phasing orifice (E) on the barrel end of the master cylinder allows the slave cylinder to fully retract when the tractor SCV lever is held in the retract position. These orifices keep the platform level during operation. Minimum pressure of 13740 kPa (130 bar) (2000 psi) is required to raise the platform.

Tongue positioning can be accomplished hydraulically by use of an optional hydraulic cylinder which is controlled by the tractor hydraulics.

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INSTALL WEATHER PACK CONTACT

NOTE: Cable seals are color coded for three sizes of wire:

a) Green - 18 to 20 gauge wire
b) Gray - 14 to 16 gauge wire
c) Blue - 10 to 12 gauge wire

1. Slip correct size cable seal on wire.

2. Strip insulation from wire to expose 6 mm (1/4 in.) and align cable seal with edge of insulation.



TS0136 -UN-23AUG88

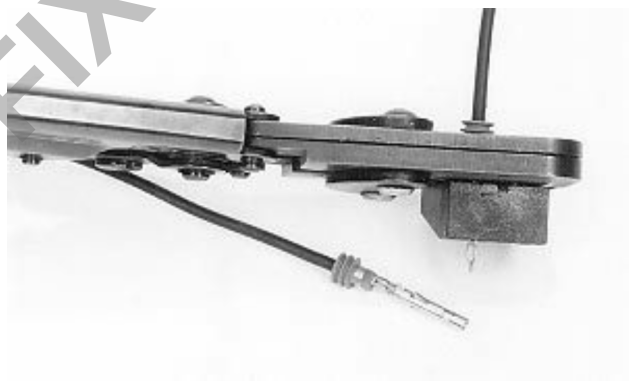
DX,ECONN,AA -19-04JUN90

NOTE: Contacts have numbered identification for two sizes of wire:

a) #15 for 14 to 16 gauge wire
b) #19 for 18 to 20 gauge wire

3. Put proper size contact on wire and crimp in place with a “W” type crimp, using JDG783 Terminal Applicator.

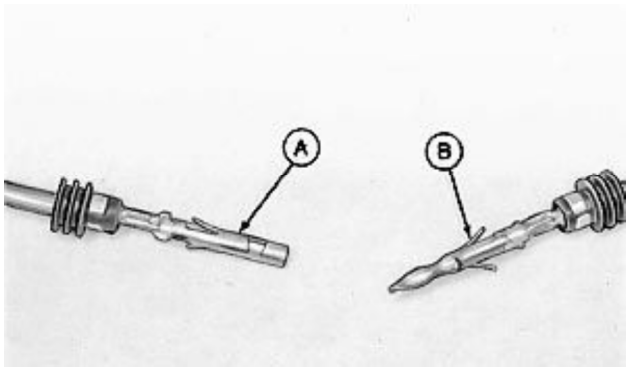
4. Secure cable seal to contact as shown, using JDG783 Terminal Applicator.



TS1623 -UN-02NOV94

DX,ECONN,AB -19-08MAR95

IMPORTANT: Proper contact installation for “sleeve” (A) and “pin” (B) is shown.



TS0139 -UN-02DEC88

DX,ECONN,AD -19-04JUN90

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HYDRAULIC CENTER LINK OPERATION

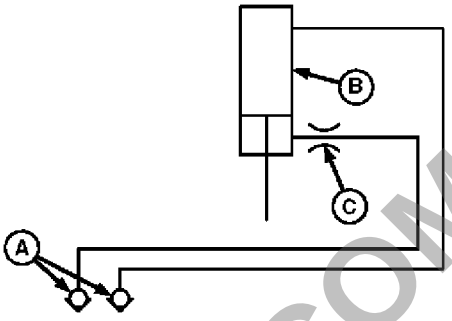
If the machine is equipped with the optional hydraulic center link, the cutterbar angle can be adjusted using the tractor hydraulics and tractor SCV.

When tractor hydraulic oil is directed to the rod end of cylinder (B), oil pressure pushes the piston rod into the cylinder barrel, causing the platform to tilt back (front of cutterbar raises). Oil at piston end of cylinder is forced back to tractor through opposite hose.

When tractor hydraulic oil is directed to the piston end of cylinder (B), oil pressure pushes the piston rod outward, causing the platform to tilt forward (front of cutterbar lowers). Oil at rod end of cylinder is forced back to tractor through opposite hose.

Orifice (C), located in port at the rod end of cylinder, restricts the oil flowing to and from the cylinder. This allows the platform to tilt at slower rate, giving the operator more control when adjusting cutterbar angle.

Hose couplers (A) allow for quick disconnection of hoses. Each coupler contains a check valve that retains the oil inside the hoses and cylinder when hoses are disconnected.



E39169 -UN-15JAN96

A—Hose Coupler
B—Center-Link Cylinder
C—Orifice

EX,1548,7005,B -19-12JAN96

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HANDLE FLUIDS SAFELY—AVOID FIRES

When you work around fuel, do not smoke or work near heaters or other fire hazards.

Store flammable fluids away from fire hazards. Do not incinerate or puncture pressurized containers.

Make sure machine is clean of trash, grease, and debris.

Do not store oily rags; they can ignite and burn spontaneously.



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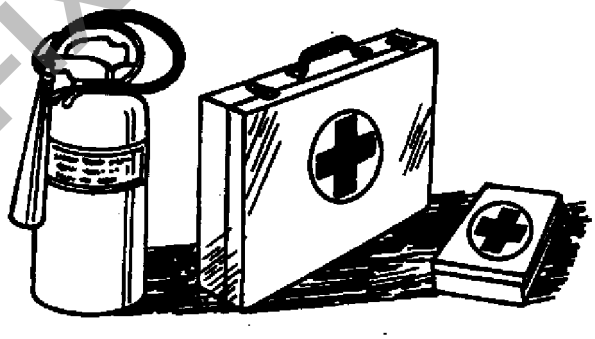
DX,FLAME -19-04JUN90

PREPARE FOR EMERGENCIES

Be prepared if a fire starts.

Keep a first aid kit and fire extinguisher handy.

Keep emergency numbers for doctors, ambulance service, hospital, and fire department near your telephone.



TS291 -UN-23AUG88

DX,FIRE2 -19-03MAR93

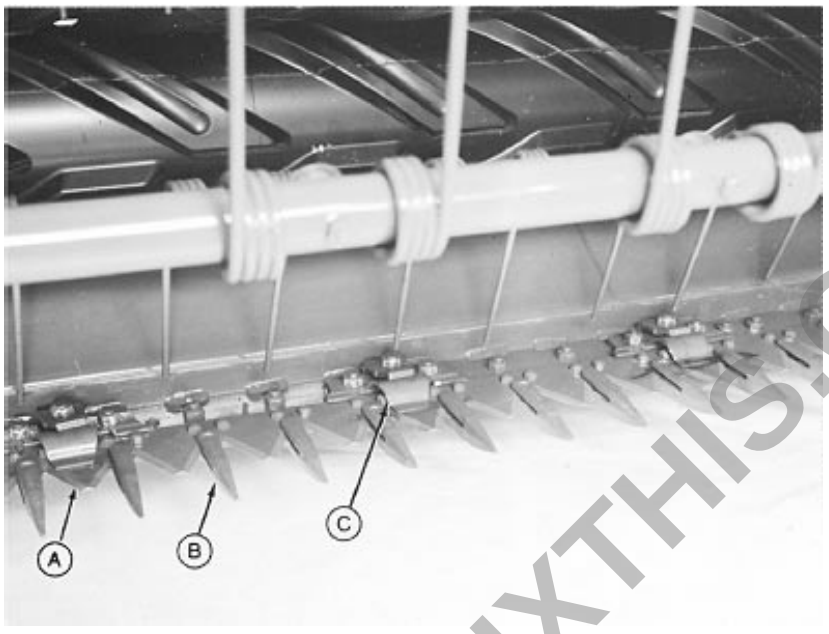
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CUTTERBAR DESCRIPTION



The cutterbar consists of the following components:
- Knife (A)
- Knife Guard (B), (Regular Type Shown)
- Knife Hold-down (C)
  [Machines (Serial No. —986000) Shown]

KNIFE
The knife consists of “overserrated” knife sections, each bolted in series on a steel bar that runs the full width of the platform.

The knife is attached to the cutterbar gear case. The cutterbar gear case changes rotary motion into reciprocating motion. This reciprocating motion causes the knife to move back and forth, producing a scissoring action between the knife and the guard ledgers.

KNIFE GUARDS
The knife guards protect the knife sections from being struck by solid objects, such as rocks. The guards also provide knife support and a ledger surface for knife sections to cut against.

There are two types of guards available:
- Regular
  —With wear bar
  —Without wear bar
- Non-Clog
  —With wear bar
  —Without wear bar

The regular guard is a two-tine type with a narrow profile. It comes standard on the 820 Mower-Conditioner. The narrow profile divides the crop and exposes more of the knife section for clean cutting in difficult conditions.

The optional non-clog guard is an open tip design. That is, the knife tip is exposed and extends over the tip of the guard so the knife is always in contact with the crop. This type of guard is used for extremely difficult cutting conditions, such as wet tangled grass.

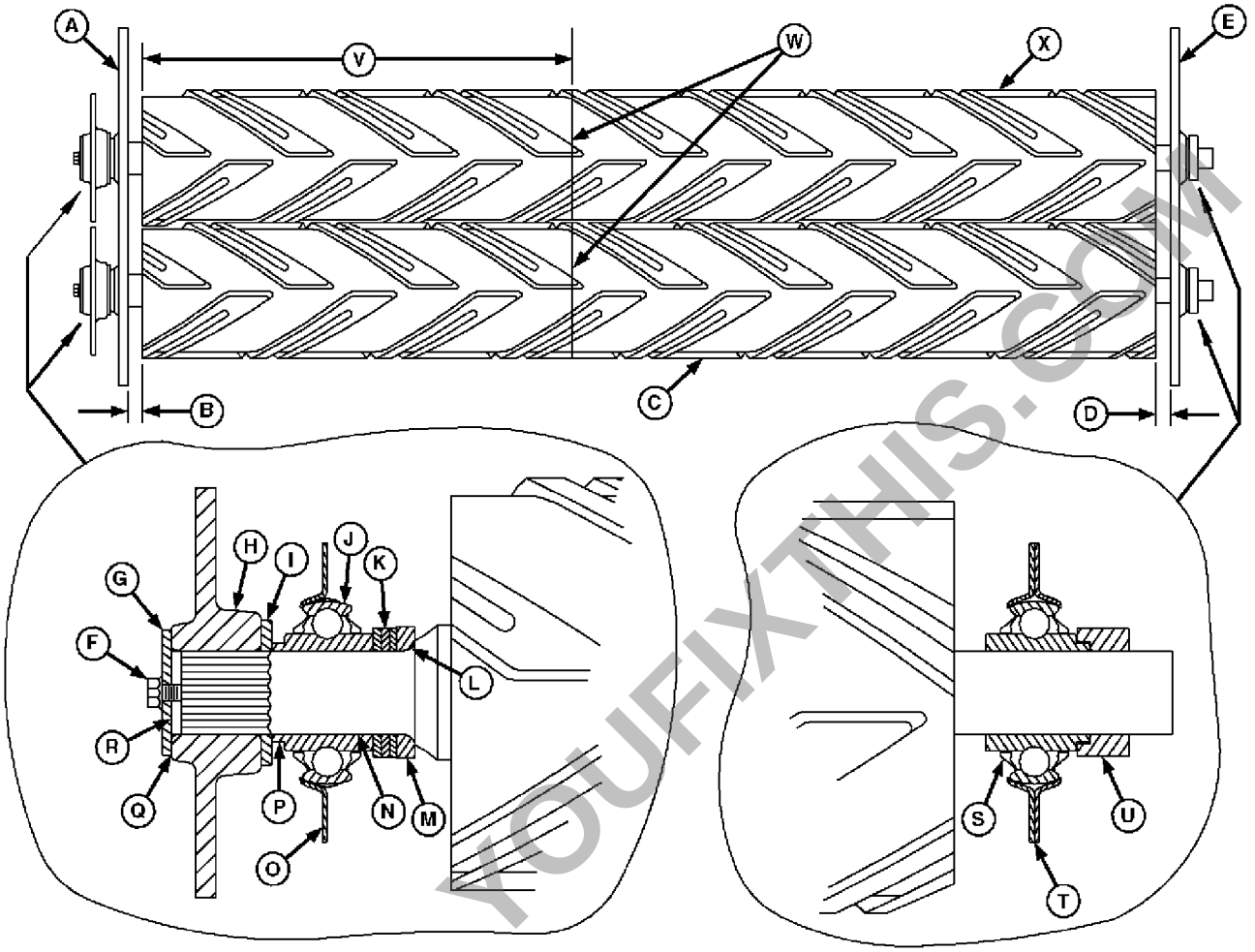
KNIFE HOLD-DOWNS
The knife hold-downs hold the knife against the cutting ledger so the knife can cut more efficiently.

There are two types of hold-downs:
- Regular
  —Stamped steel (S.N. —986000)
  —Forged steel (S.N. 986001—)
- Non-Clog
  —Stamped steel (S.N. —986000)
  —Forged steel (S.N. 986001—)

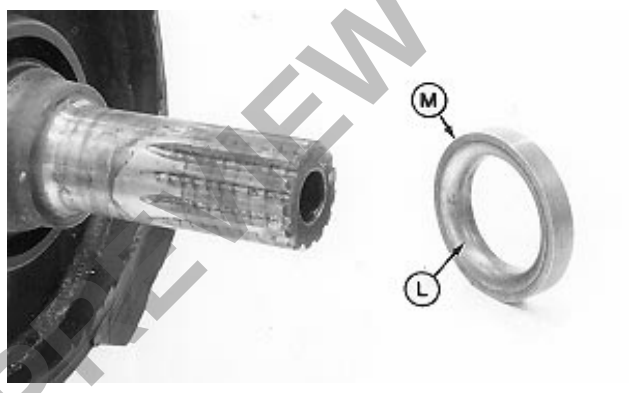
Because of the non-clog guard open tip design, this type guard requires hold-downs over each guard so minimal tolerances can be maintained for positive cutting and extended knife/guard life.

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