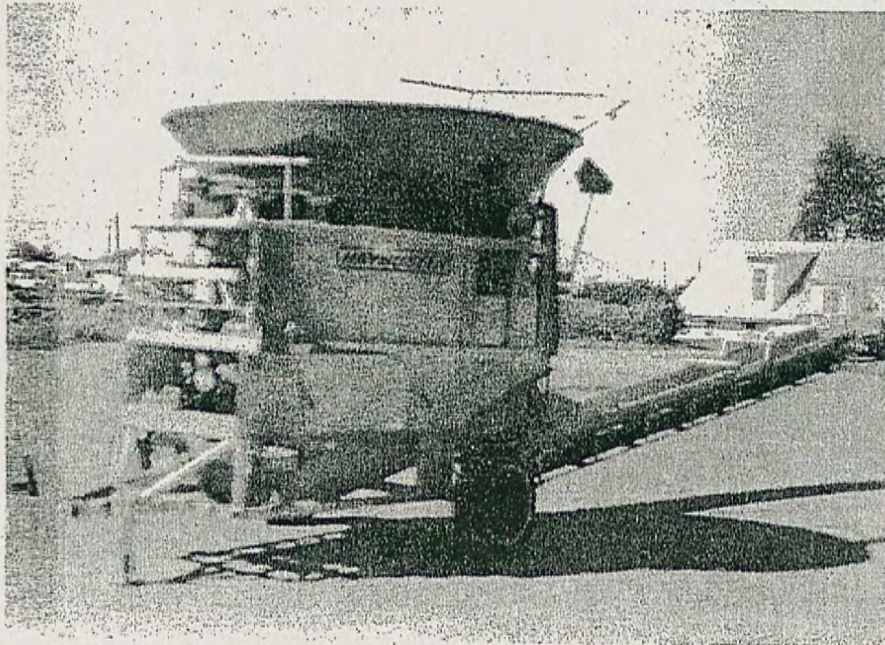


No.75

# **HAYBUSTER**

**C-9 TUB GRINDER**  
**FOR BIG BALES                      LOOSE HAY**



**OPERATORS MANUAL**  
**MAINTENANCE                      PARTS**

**HAYBUSTER MFG. INC.**  
**BOX 1008    JAMESTOWN, N.D. 58401**



# HAYBUSTER GRINDER WARRANTY

For one year from purchase date, HAYBUSTER MANUFACTURERS will replace for the original purchaser, free of charge, any part or parts found upon examination at our factory in Jamestown, North Dakota, to be defective upon normal use and service, on account of defects in material or workmanship. HAMMERS, SCREENS, BELTS, BEARINGS and TIRES ARE NOT INCLUDED IN THIS WARRANTY.

This warranty shall not be effective if the machine has been subject to misuse, negligence, or accident, nor if the machine has been altered outside of our factory, which in our judgement effects its conditions or operation.

WARRANTY REGISTRATION FORM MUST BE FILLED OUT AND SIGNED TO VALIDATE YOUR WARRANTY PROTECTION

## HAYBUSTER WARRANTY REGISTRATION

(PLEASE PRINT IN INK)

OWNERS NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

DEALERS NAME \_\_\_\_\_

DEALERS ADDRESS \_\_\_\_\_

### MACHINE INFORMATION

MODEL \_\_\_\_\_

SERIAL NUMBER \_\_\_\_\_

DATE PURCHASED \_\_\_\_\_

VALID ONLY IF FILLED IN AND RETURNED  
WITHIN 30 DAYS OF PURCHASE TO:

HAYBUSTER MFG.  
BOX 1008  
JAMESTOWN, NORTH DAKOTA 58401

REPLACEMENT PARTS ARE AVAILABLE ONLY THROUGH YOUR HAYBUSTER DEALER.

To obtain the fastest service, always remember to:

1. Order by part number
2. Give the machine year and model.
3. Include the serial number.



# SPECIFICATIONS

Weight .....	4400#
Width .....	9'
Height .....	8' 9"
Length .....	13' 3"
Wheels .....	Drop center rims, Timken Bearings
Bearings .....	All standard size, grease sealed
Recommended tire size .....	7.60 x 15, 6 ply
Recommended power .....	80 to 250 H.P.
Main Drive .....	PTO, 1000 RPM or 540 RPM
Capacity .....	varies with type of hay, HP & screen size

## HAMMERMILL

Standard number of hammers .....	60
Hammer Size .....	2-1/2" x 7-3/4" x 5/16" or 3/8"
Cylinder Shaft Diameter .....	3 stress proof
Cylinder Size .....	40" long, 26" diameter with hammers extended
Screen Area .....	2,520 Sq. In.
Hammer Pins .....	8, each 15/16"

## FEED DELIVERY

Conveyor .....

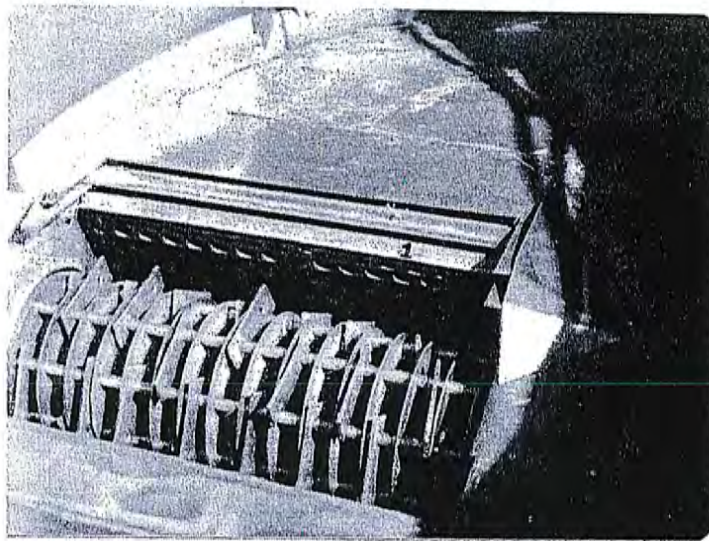
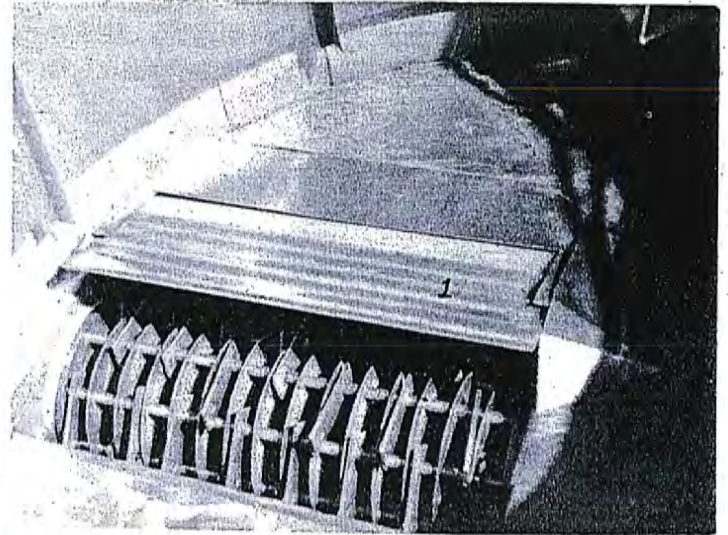
with rubber belt conveyor with rubber slats

## TUB

Width .....	9"
Depth .....	53"
Tub Drive .....	Chain driven

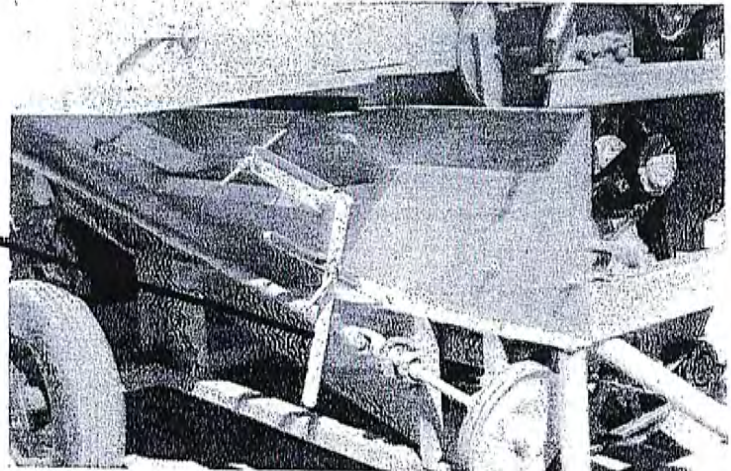
# OPERATING YOUR TUB GRINDER

Control Plate (no. 1 on pictures) adapts this machine to a wide range of tractor horsepower. Pictures show plates in extreme positions. Plate allows operator to grind in wet or tough hay conditions.



The recommended procedure is to bag in grinding in the position shown in the middle picture, and gradually retracting the plate until you get maximum grinding capacity for your horsepower and hay conditions.

Control Lever



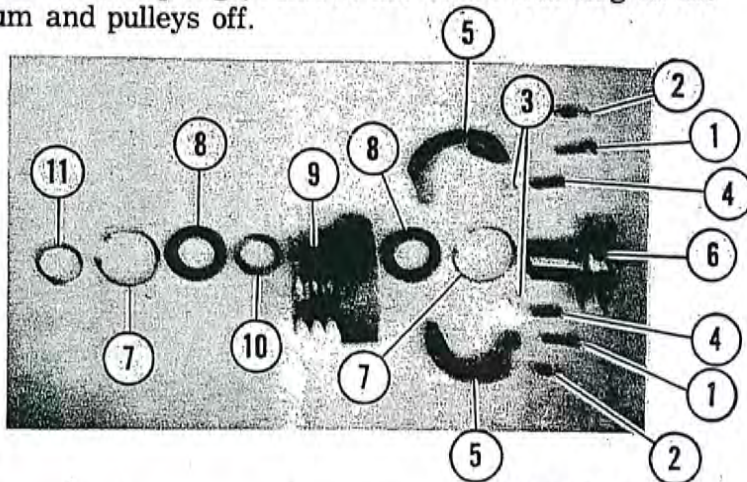
# OPERATING YOUR TUB GRINDER

## FEEDER TUB SPEED

The feeder tub carries hay across the hammers and the tub speed determines the rate of grinding. The tub speed must be set to hay conditions and available H.P. of the power unit. IF CLUTCH IS OPERATING QUITE OFTEN, THE TUB SPEED IS TOO FAST.

## CENTRIFUGAL CLUTCH

As the cylinder speed gets up to 1700 RPM, the clutch will engage and start the tub turning. The cylinder should run at least 1800 RPM to insure that the clutch is pulled in solid and is not slipping. Excessive clutch slipping will overheat the linings and cause them to glaze. If a slug of hay pulls the tractor RPM down, the clutch will release and the tub will stop. CAUTION: Adjustment of eccentric bolts at rear of clutch is quite critical. Refer to drawing page 6. If it is necessary to clean the linings or inspect the clutch springs, remove the inside lock ring on the pulley end of the clutch and pull the drum and pulleys off.



### DESCRIPTION

### PART NO.

1	2 - adjusting bolts .....	80-CB-102
2	2 - springs .....	80-20-106
3	2 - E rings .....	80-29-52
4	2 - Pivot pins .....	80-25-60
5	2 - Shoes .....	80-117-30
6	1 - Hub .....	80-110-395
7	2 - Snap rings, drum .....	80-29-65
8	2 - Bearings .....	80-30-21
9	1 - Drum .....	80-159-49
10	1 - Spacer .....	80-27-91
11	1 - Snap ring, hub .....	80-29-63

### Not Shown

4 - Spacers .....	80-41-15
Complete clutch number .....	80-60-U-17
Hub complete with shoes, bolts, springs, snap rings .....	80-166-11
Drum assembly with bearings, spacers, snap rings .....	80-159-50

# OPERATING YOUR TUB GRINDER

## TROUBLE SHOOTING — CENTRIFUGAL CLUTCH

**Problem** - Tractor pulls down too far - Clutch kicks out too late.

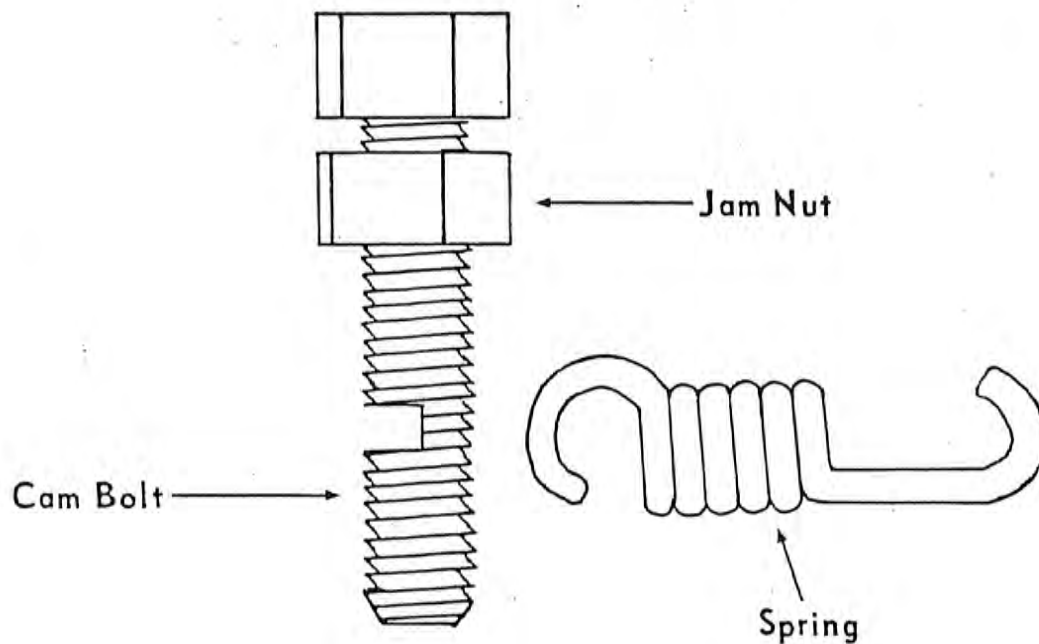
**Correction** - Facebolthead (Direction of Arrow) Use 2 wrenches - loosen Jam Nut - Turn bolt C.W. 1/8 turn to tighten spring - Lock Jam Nut - Adjust both bolts the same.

**Problem** - Too little adjustment on spring. Still kicks out too late.

**Correction** - Break off one weight from each shoe. This has same effect as stronger spring.

**Problem** - Clutch does not lock in solid. Slips and heats.

**Correction** - Check Cylinder RPM. Must be 1800 or higher. Turn Cam bolts CCW to loosen spring. Remove Drum and wire brush shoe lining.

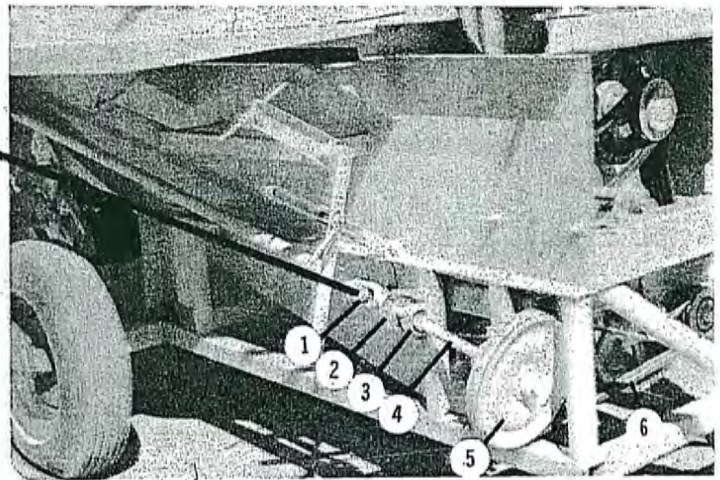




# MAINTENANCE, LUBRICATION & PARTS

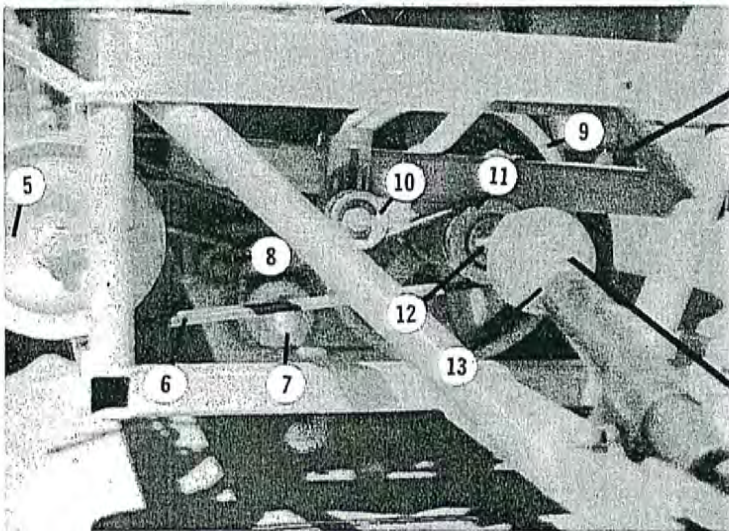
**GREASE U.J. EVERY 10 HOURS**

- 1 U-Joint 1 "Rd to 1" Rd ..... 80-UJ-100
- 2 Sprocket ..... 10-50-18-100
- 3 2 - Pillow Block Bearings ..... 50-PB-100
- 4 Shaft ..... S-21-100-1M
- 5 2 - Steel Pulleys ..... 1000 RPM - 30-12B-100  
540 RPM - 30-7B-100



Available with 540 or 1000 R.P.M.  
1000 R.P.M. is recommended

**Keep drive belts drum tight  
by use of tightening bolt**

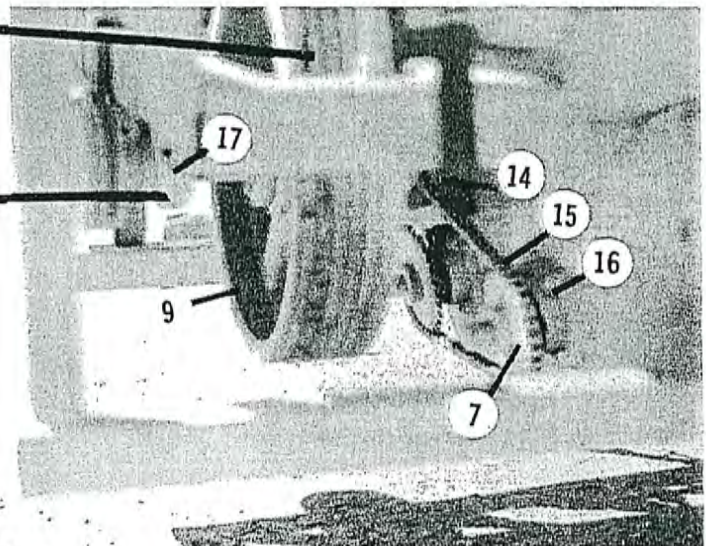


- 6 2 - V-Belts ..... 1000 RPM - 40-B-77  
540 RPM - 40-B-68
- 7 2 - Sprocket ..... 10-50-30-114
- 8 Sprocket Idler (50 pitch) ..... 10-50-17-12-I
- 9 Cast Pulley ..... 35-18.4-6B  
Hub for Above ..... 35-Q2-134
- 10 2 Gr. Belt Idler ..... 30-312-2B-12-I
- 11 Cast Pulley ..... 35-5-2B  
Hub for Above ..... 35-P1-134

**GREASE U.J.  
EVERY 10 HOURS**

**Keep drive belts  
drum tight**

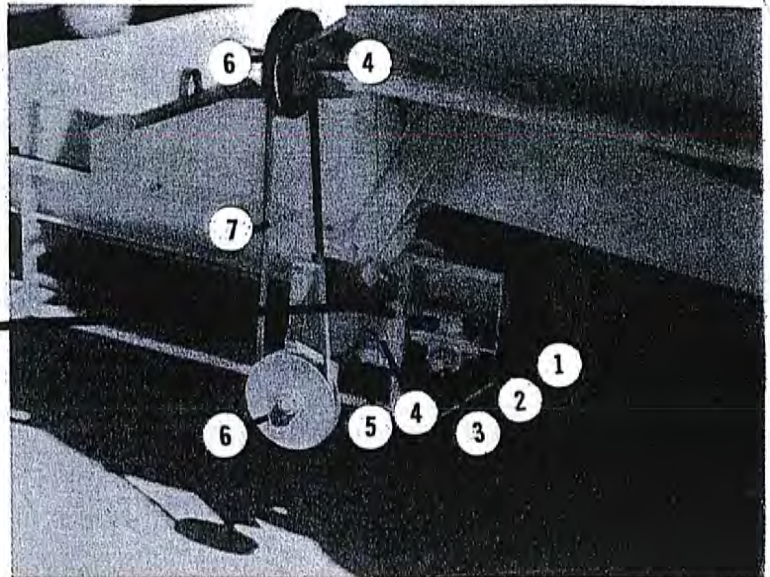
**Grease input bearings front &  
rear sparingly every 10 hours**



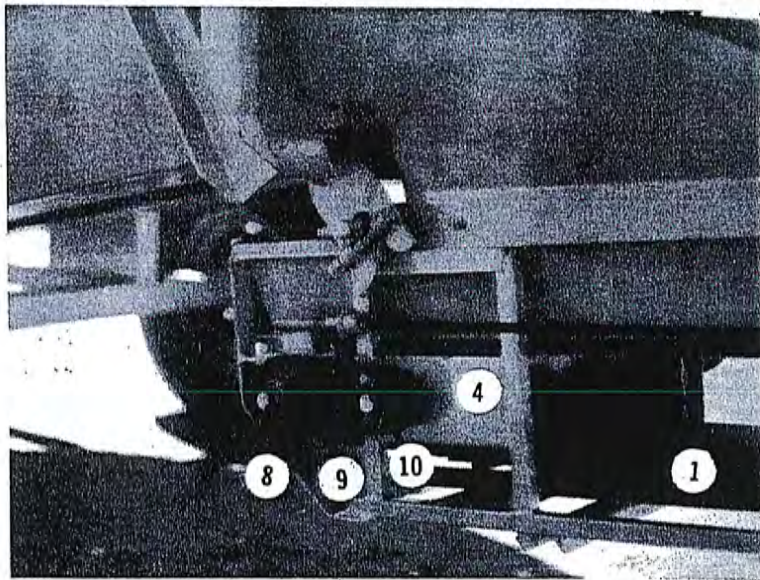
- 12 Input Shaft ..... S-22-134-1B
- 13 P.T.O. Shaft (Machine Half) ..... 80-MH-100
- 14 Wood Block (not shown) ..... J-410
- 15 50 Pitch Chain ..... 11-50-131-CL
- 16 2 - Bearings ..... 50-4F-114
- 17 2 - Pillow Block Bearings ..... 50-PB-134

# MAINTENANCE, LUBRICATION & PARTS

- 1 Conveyor Belt .....40-C-16-39'4"
- 2 Conveyor Drive Roller .....S-24-118-16-1K
- 3 2 - Pillow Block Bearings .....50-PB-118
- 4 Bearings .....50-2RAF-100
- 5 Shaft .....S-38-100-1S
- 6 2- Steel Pulleys .....30-7C-100



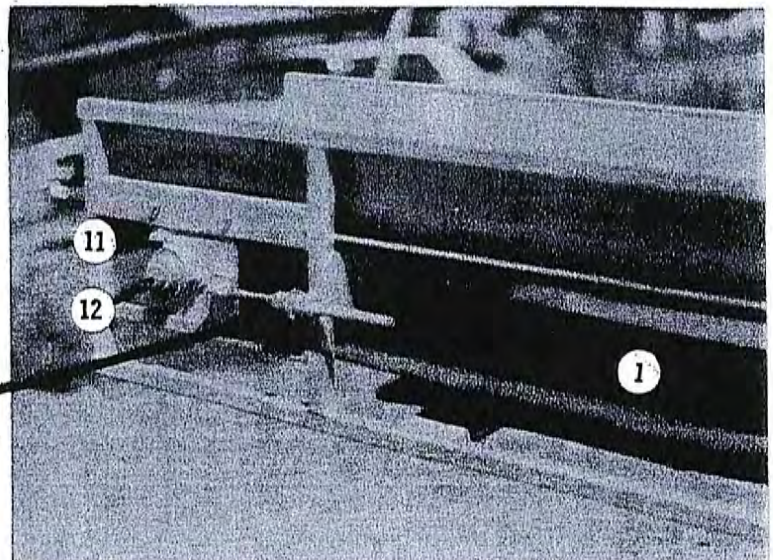
Chain tightener  
adjustment



- 7 V-Belt.....40-B-68
- 8 Sprocket.....10-50-20-100
- 9 50 Pitch Chain .....11-50-37-0L-CL
- 10 Sprocket.....10-50-15-100

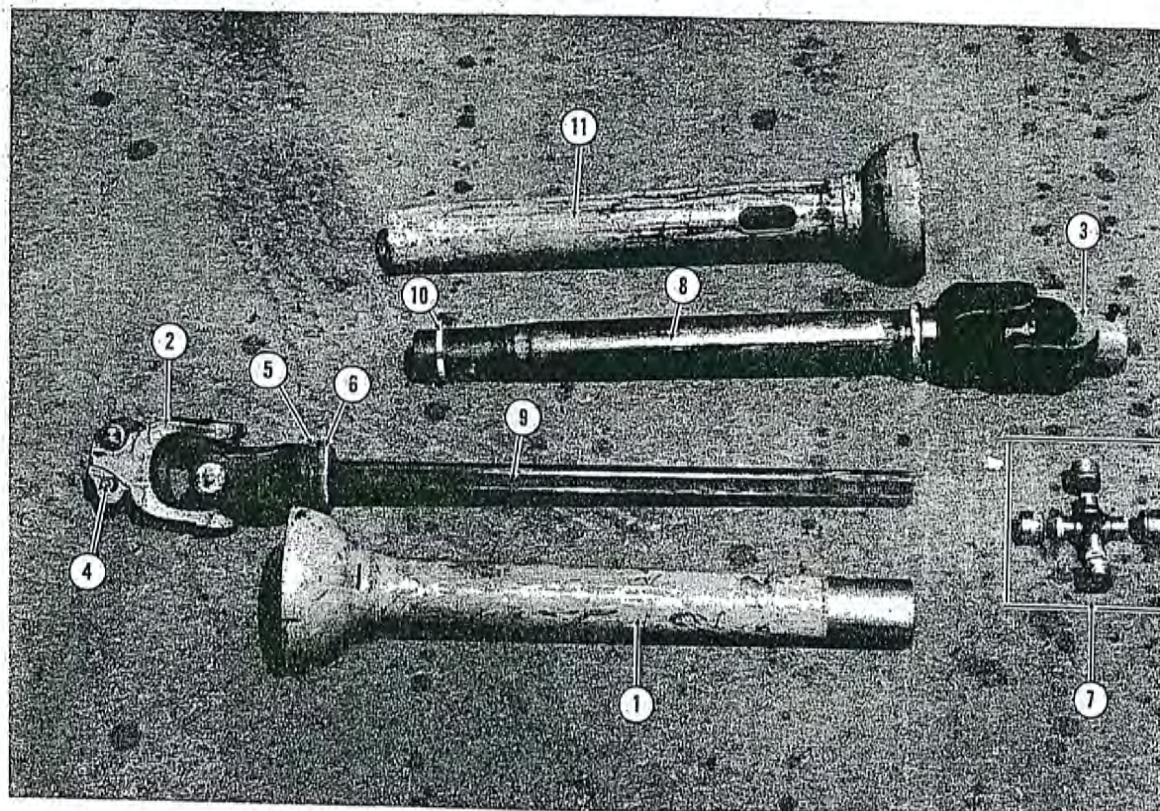
Chain  
Tightener  
Adjustment

- 11 2 -Bearings .....50-3RAF-118
- 12 Conveyor Idler Roller .....S-22-118-16-1L



Adjust conveyor belt  
Tension, both sides

# MAINTENANCE, LUBRICATION & PARTS



## DESCRIPTION

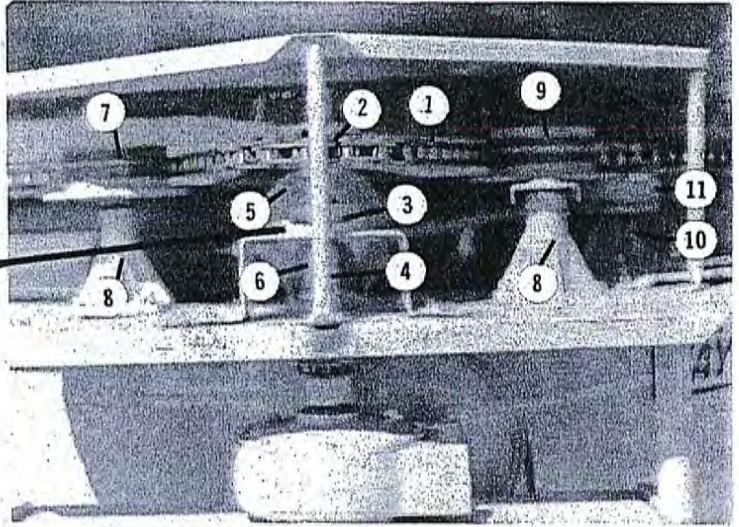
## PART NO.

1	1 - Inside shield.....	PTOIS-100
2	2 - Tractor Yoke with spline - 1000 .....	PTY-440-21
	Tractor Yoke with spline - 540 .....	PTY-440-6
3	1 - Machine yoke .....	PMY-440
4	1 - Lockpin & Spring .....	PLPS-440
5	1 - Lock ring & washer .....	PLRW-440
6	2 - Nylon bushings .....	PNB-442
7	1 - Cross & bearing assembly.....	PCBA-440
8	1 - Female tube with yoke .....	PFT-440
9	1 - Male shaft with yoke .....	PMS-440
10	1 - Nylon bushing .....	PNB-441
11	1 - Outside shield .....	PTOOS-100

# MAINTENANCE, LUBRICATION & PARTS

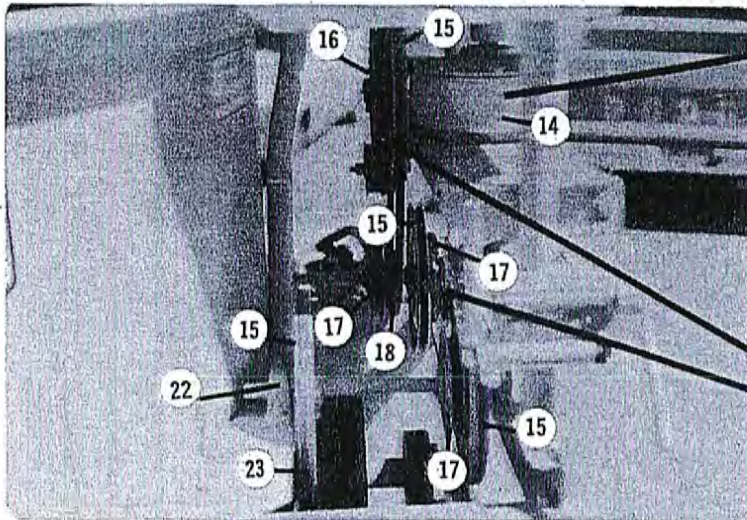
- 1 Tub Chain ..... 11-6700H-129-CL  
..... 11-2080-137-CL
- 2 Tub Drive Sprocket ..... 10-6700H-14-114  
..... 10-80-30-114
- 3 Bearing ..... 50-4F-114
- 4 Shaft ..... 5-14-114-1G
- 5 Tub Roller ..... 20-2S

**Tub support rollers  
GREASE DAILY**



- 6 Tub Roller Bracket ..... 20-3
- 7 Chain Guide Roller ..... 20-6S
- 8 Stand ..... 20-44
- 9 Chain Idler Roller ..... 20-6
- 10 Stand ..... 20-4
- 11 Pressure Roller ..... 20-5S
- 12 Double Roller Chain ..... 10-60-2-11-CL
- 13 2 - Sprockets ..... 10-60-12-114-S

**use 90 grease and STP**



- 14 Gear Box ..... 80-A-26-12:1
- 15 4 - Steel Pulleys ..... 30-12B-100
- 16 Steel Pulley ..... 30-10B-100
- 17 Steel Pulley ..... 30-7B-100
- 18 Steel Pulley ..... 30-5B-100
- 19 V-Belt ..... 40-B-60
- 20 Flat Idler Pulley ..... 30-4F1-58
- 21 V-Belt ..... 40-B-77
- 22 4 - Pillow Block Bearings ..... 50-PB-100

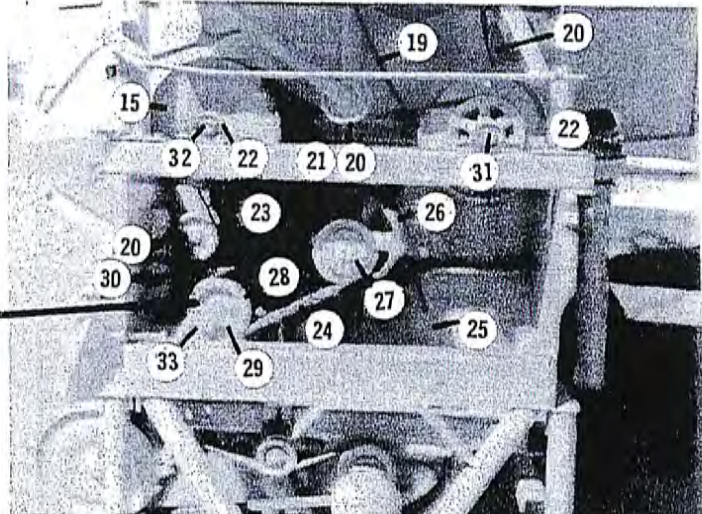
**Move belts to  
change tub speed**

**Grease cylinder bearings, front &  
rear sparingly every 10 hours**

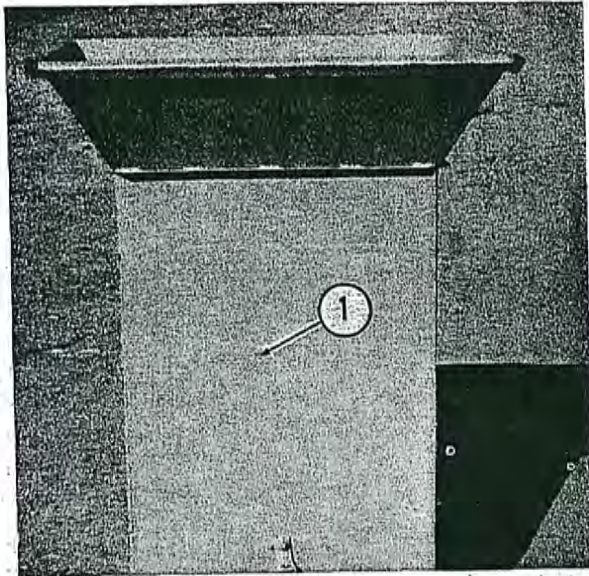
- 23 V-Belt ..... 40-B-60
- 24 V-Belt ..... 40-B-42
- 25 6 - V-Belts ..... 1000 RPM - 40-B-83  
540 RPM - 40-B-77
- 26 Cast Pulley ..... 1000 RPM - 35-11-6B  
Hub for Above ..... 35-Q2-2316  
540 RPM - 35-6-6B  
35-Q1-2316
- 27 Cast Pulley ..... 35-6-2B  
Hub for Above ..... 35-Q1-2316

**Centrifugal Clutch  
See pages 5 & 6**

- 28 Cast Pulley ..... 35-6-2B  
Hub for Above ..... 35-H-114
- 29 2 - Pillow Block Bearings ..... 50-PB-114
- 30 Clutch (code blue) ..... 80-60-U-17-R-B
- 31 2nd Counter Shaft ..... S-17-100-1P
- 32 1st Counter Shaft ..... S-17-100-1N
- 33 Clutch Shaft ..... S-17-114-1J



# HAYBUSTER C-9 OPTIONAL EQUIPMENT

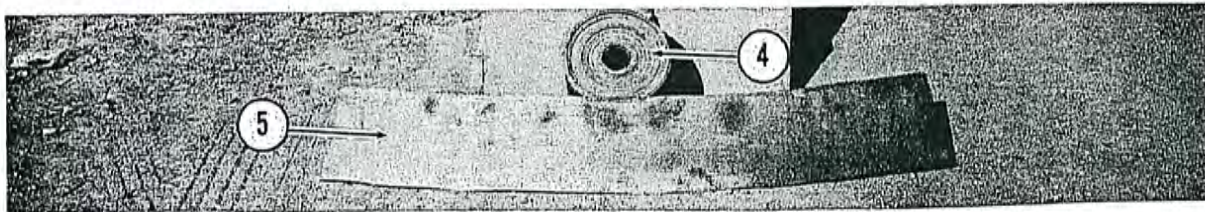
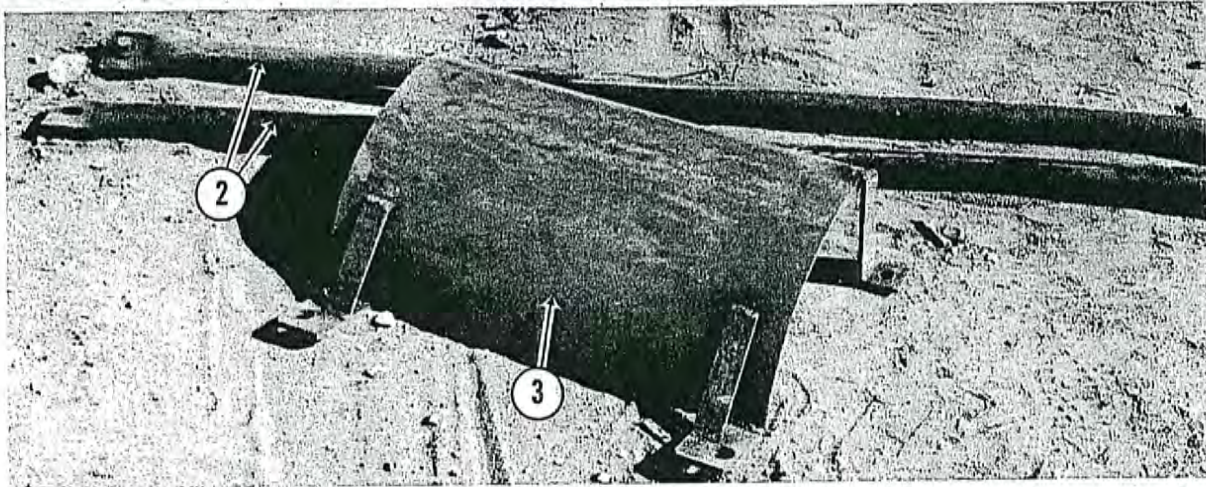


Corn and Grain Kit.  
TUB STATIONARY

<u>DESCRIPTION</u>	<u>PART NO.</u>
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1 - Hopper .....	J-301
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A means of conveying the corn or grain into the hopper is necessary. Screens with smaller perforations than the normal hay screens are also necessary, size is determined by the type of grain to be ground. See page 3 for screen sizes.



## CORN KIT WITH TUB ROTATING

<u>DESCRIPTION</u>	<u>PART NO.</u>
2 2 - 1-1/2" pipes .....	J-305
3 1 - Cylinder cover .....	J-303
4 1 - 6" wide belt .....	J-309
5 5 - segmented ring .....	J-307

# MAINTENANCE, LUBRICATION & PARTS

**Optional Hay  
Guide**

**Safety wire  
during transport**

