



Operator's Manual

Minneapolis Moline

Operator's Manual

D

Corn Sheller

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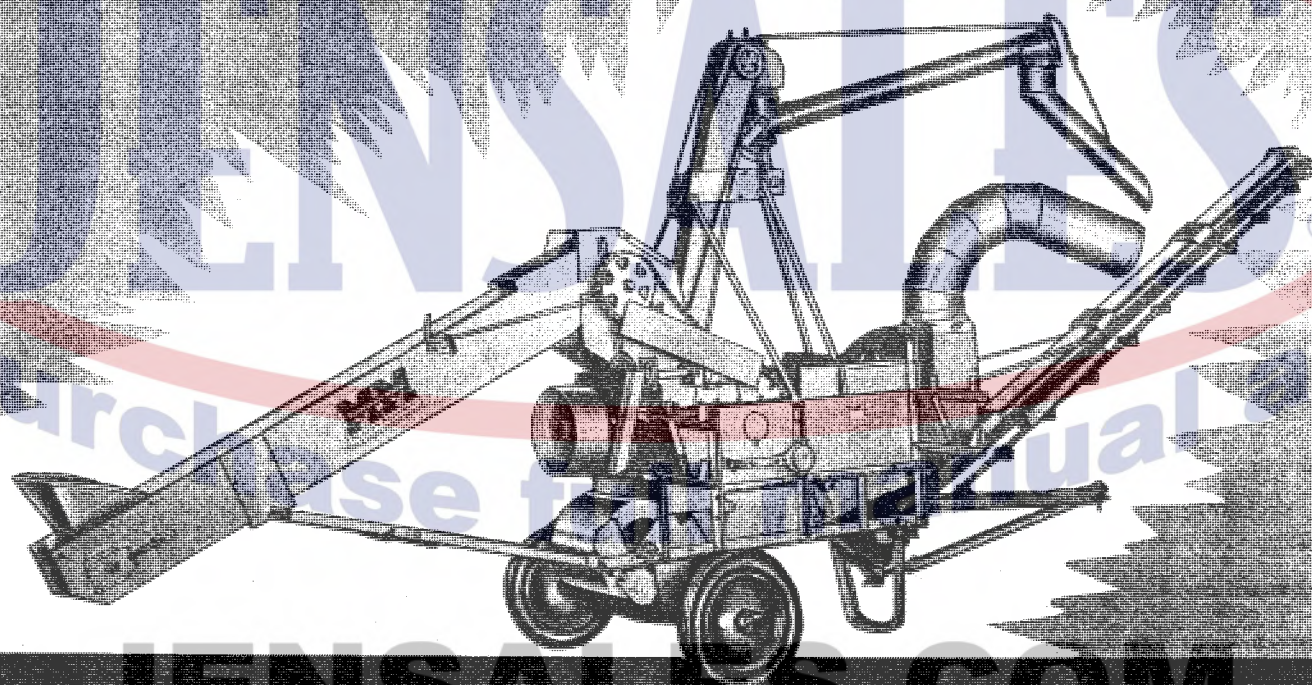
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MM-O-D SHELL

S-192

ASSEMBLY OPERATION MAINTENANCE MANUAL



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MODEL

SHELLER

MINNEAPOLIS-MOLINE CO.

MINNEAPOLIS 1, MINNESOTA

U.S.A.

FOREWORD

This manual has been prepared as a guide for the owner and operator of the Model "D" Corn Sheller. To obtain the maximum life and efficiency from your sheller, we recommend reading this manual thoroughly and following all instructions carefully.

When ordering repair parts, it is recommended that you contact your MM dealer as only he has the genuine MM parts.

For your convenience, space has been made available on page to insert the model and serial numbers for the sheller. When ordering parts, always give your dealer this information as it will aid him in supplying you with the correct parts.

TABLE OF CONTENTS

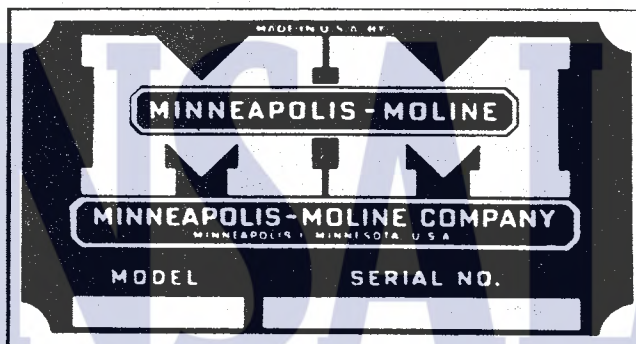
Specifications	2
Lubrication	3
Assembly	7
Operation	19
Maintenance	23

SERIAL NUMBER

To have the serial number and the model of the Sheller easily accessible, write this information in the space provided below.

Include the serial number and the model of the sheller when any parts are ordered, or in any correspondence concerning the machine.

The model and serial number plate is riveted to the elevator side of the sheller near the blower housing.



SPECIFICATIONS

Capacity husked corn	175-300 Bu.
Capacity snapped corn	75-200 Bu.
RPM of Cylinder	800 RPM
Length of cyl. cage	32"
Diameter of cyl. shaft	17/8"
Cylinder shaft bearings	1 Ball, 2 Roller
Countershaft bearings	2 Roller
Eccentric shaft bearings	2 Roller
Bottom sieve area	5.25 sq. ft.
Cob rack area	2.48 sq. ft.
Length of cob stacker	14 ft.
Diameter cleaning fan	17 inches
Diameter suction fan	26 3/4"
Over-all width	4'8"
Over-all height (over shelled corn elev.)	10'
Over-all length (inc. ear corn elev.)	17'8"
Weight complete	1800 lbs.
Power recommended	15-25 HP.

DRAGS

Detach the elevator jack from the feeder and bolt the swivel drive support to the feeder as shown. When attaching the swivel drive support to the feeder, insert the carriage bolts so the bolt heads will be on the inside of the feeder.

Reattach the elevator jack to the feeder, slip the drive sprocket, hub first, on the end of the feeder shaft and secure it with the square key. Install the drive chain with the split portion of the links facing out from the sprockets and in the direction of chain travel. Tighten the chain by sliding the swivel drive away from the feeder drive sprocket and tighten the mounting bolts securely.

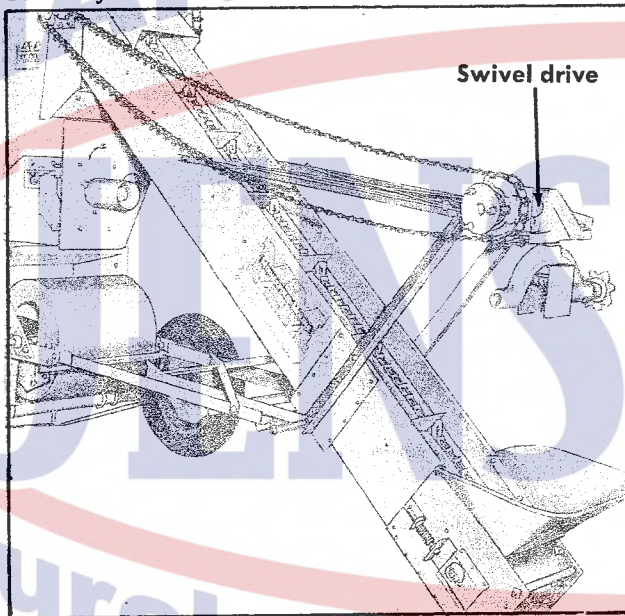


Fig. 34 Swivel drive installed

INCLINED DRAG SECTION

Turn the swivel drive until the sprocket is positioned at the right side. Remove the wedge pins from the inclined drag section arms and place the arms over the swivel drive yoke. Insert the wedge pins under the yoke and install the cotter keys in the wedge pins.

Loosen the six carriage bolts which hold the drag arms and push the drag toward the swivel drive. Install the drive chain sprocket on the conveyor shaft with the sprocket hub facing out. Install the drive chain with the split side of the links facing out and in the direction of chain travel. Align the conveyor sprocket with the swivel drive sprocket and secure it to the shaft with the square key and setscrew. To tighten the drive chain, slide the drag away from the swivel drive an equal amount on both arms and tighten the six carriage bolts.

If the drive chain strikes the sheet metal guard, bend it until the proper clearance is obtained.

INNER DRAG SECTION

Lay the drag chain in the inner drag with the open end of the links up and forward in the direction of travel. Place the chain around the drag chain sprocket and thread it under the drag. Leave the unconnected ends of the chain loose at the rear end of the drag. Remove the chain guard over the sprockets by removing the hinge rod.

Position the inner drag section forward bearings in the slots at the outer end of the inclined section. Make certain that the sprocket on the lower shaft of the inclined section is on the right side of the shaft with the sprocket hub out.



Fig. 35 Inclined drag section

CYLINDER SHAFT BEARINGS

To replace the cylinder shaft bearings, proceed as follows:

If a PTO drive is bolted to the blower housing, remove the ten PTO drive mounting bolts and pull the PTO assembly from the housing.

Remove the grease fitting from the bearing at the blower end of the cylinder shaft. Remove the two bolts which secure the bearing to the horizontal angle brace and slip the bearing off the shaft.

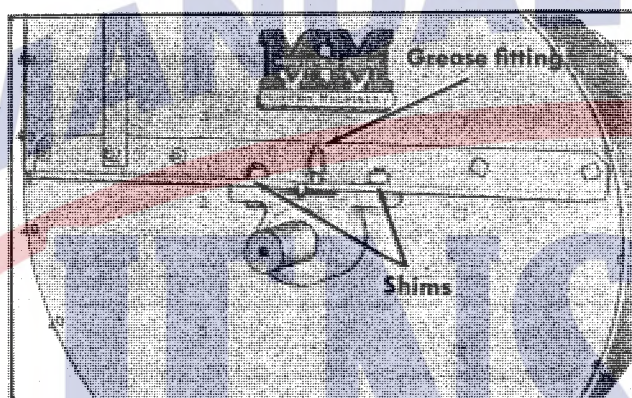


Fig. 53 Cylinder shaft bearing

Be careful not to lose any shims found between the support angle and the bearing housing. These shims were originally installed at the factory to obtain correct bearing alignment and must be replaced when the bearing is reinstalled.

Remove the nineteen bolts which are spaced around the blower housing rim and remove the outer blower head from the blower housing. Pull the blower fan off the cylinder shaft with a suitable puller as illustrated.

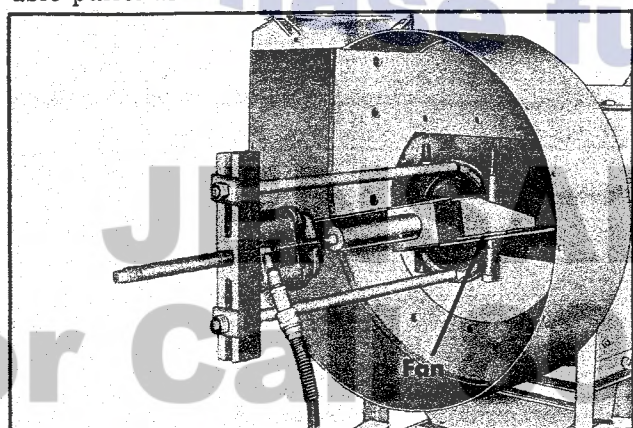


Fig. 54 Pulling blower fan

Loosen the clamp and setscrew on the cylinder shaft guard and slip the guard off the shaft.

Remove the two bolts which secure the cylinder shaft center bearing to the support angle and slip the bearing off the shaft. Be careful not to lose



Fig. 55 Cylinder shaft guard

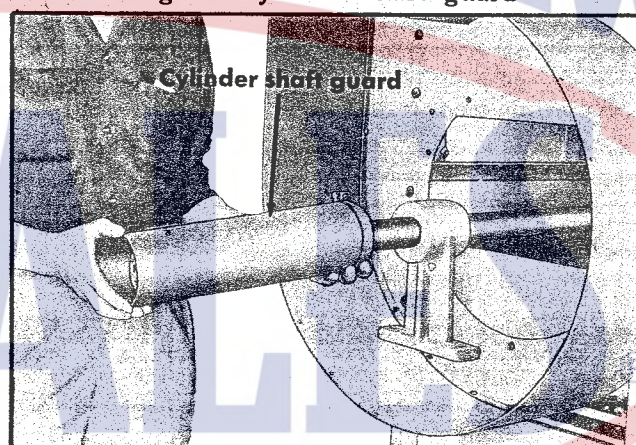


Fig. 56 Cylinder shaft guard removed



Fig. 57 Cylinder shaft center bearing

any shims found between the support angle and the bearing housing. These shims were originally installed at the factory for correct bearing alignment and must be replaced when the bearing is reinstalled.

To gain access to the cylinder shaft bearing at the feeder end of the sheller, pull the cylinder drive pulley off the shaft and remove the cylinder drive shield. Split the roller drive chain and pull

INDEX

ASSEMBLY

Bagging attachment	15
Belts	7
Center drag section	17
Chains	7
Cob stacker installation belt driven sheller	11
Cob stacker installation PTO driven sheller	12
Cob stacker installation truck mounted	12
Cylinder drive installation belt driven	13
Cylinder drive installation power take-off driven	13
Drags	16
Elevator installation	8
Extra equipment	14
Fan drive belt	14
Feeder hopper extension	15
Feeder installation	10
Inclined drag section	16
Outer drag section	17
Power take-off drive attachment	14
Side boards	18
Transport brackets	15

LUBRICATION	3
-------------	---

MAINTENANCE

Bevel gear box	23
Bronze sleeved bearings	26
Chain and belt tighteners	26
Cylinder shaft bearings	24
Eccentrics	25
Off season storage	26
Shoe rocker arm bearings	26
Slip clutches	23

OPERATION

Adjustment of cleaning fan blast	21
Adjustment of sliding damper on blower	21
Cleaning shoe screen	21
Cob rack adjustment	21
Cob stacker shelled corn grate	22
Initial run	20
Installation of cylinder pegs, discharge plate, and thresher teeth	22
Setting up the sheller (belt driven model)	20
Setting up the sheller (power take-off model)	20
Sieves	22
Sliding shutter and retarding damper	20
Transportation	19

SPECIFICATIONS	2
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