

Operator's Manual



McCORMICK®

No. 45

Baler

INTERNATIONAL HARVESTER COMPANY

180 North Michigan Ave.

Chicago 1, Illinois, U.S.A.

TABLE OF CONTENTS

INTRODUCTION

Facts about your baler	4
Preparing the crop for baling	6

OPERATION

Preparing your baler for work

Lubrication	7
Hitching	7
Threading tying mechanism	8-9
Safety devices	9-11

Operation of your baler

Direction of travel	12
Operating speed	12
Pickup height	12
Pickup cover	13
Packer fingers	13-14
Bale chamber tension	14
Twine tension	14-15
Knotter hook tension	15
Bale length	15
Bale counter	15

CARE OF YOUR BALER

Lubrication	16-17
Pickup	18
Feeder	19
Bale chamber and plunger	20-21
Tying mechanism	22

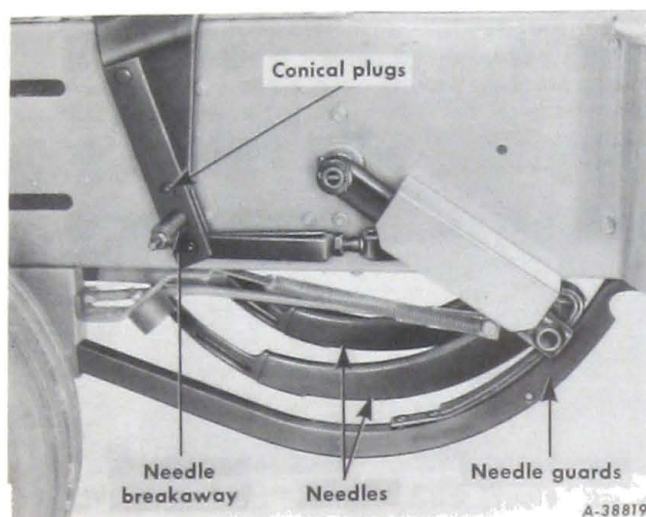
FINDING TROUBLE

Finding trouble	23-25
---------------------------	-------

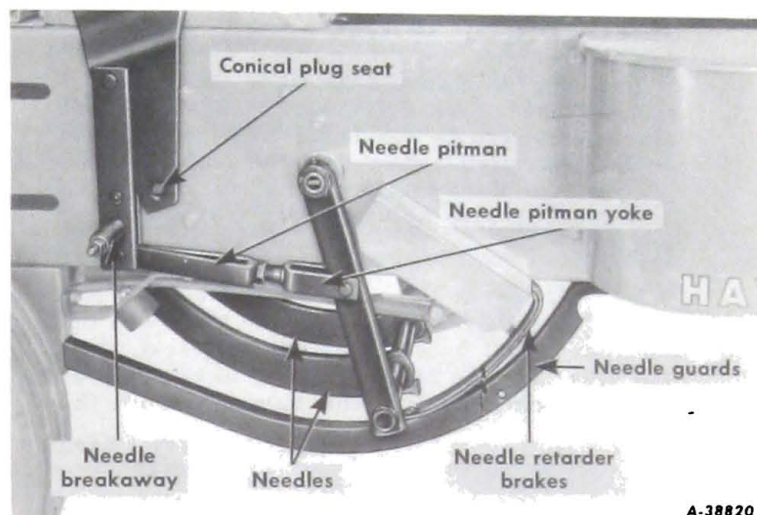
STORAGE, SPECIAL EQUIPMENT, SPECIFICATIONS

Storage	26
Special equipment	26-32
Specifications	33

PREPARING YOUR BALER for work



Illust. 11A - Needle breakaway which safeguards the needles (in operative position).

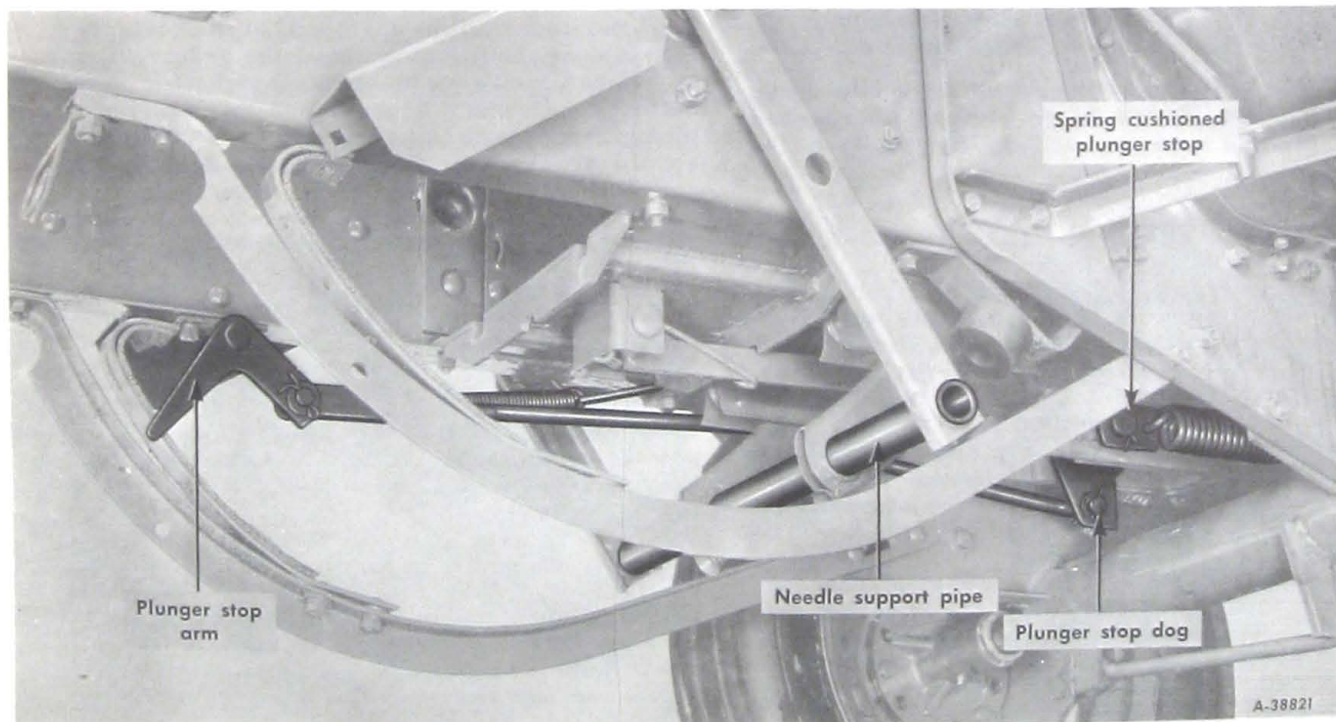


Illust. 11B - Needle breakaway which safeguards the needles (in inoperative position); notice that the conical plugs are out of their seats.

needles are left in the bale chamber, the plunger stop comes into play and shears the flywheel shear bolt. Spring tension on the

needle breakaway should be adjusted to prevent the needles from breaking away during normal operation.

Illust. 11C - Plunger stop which keeps plunger from compressing hay against the needles if they are left in the bale chamber.



Form Number GSS-1294

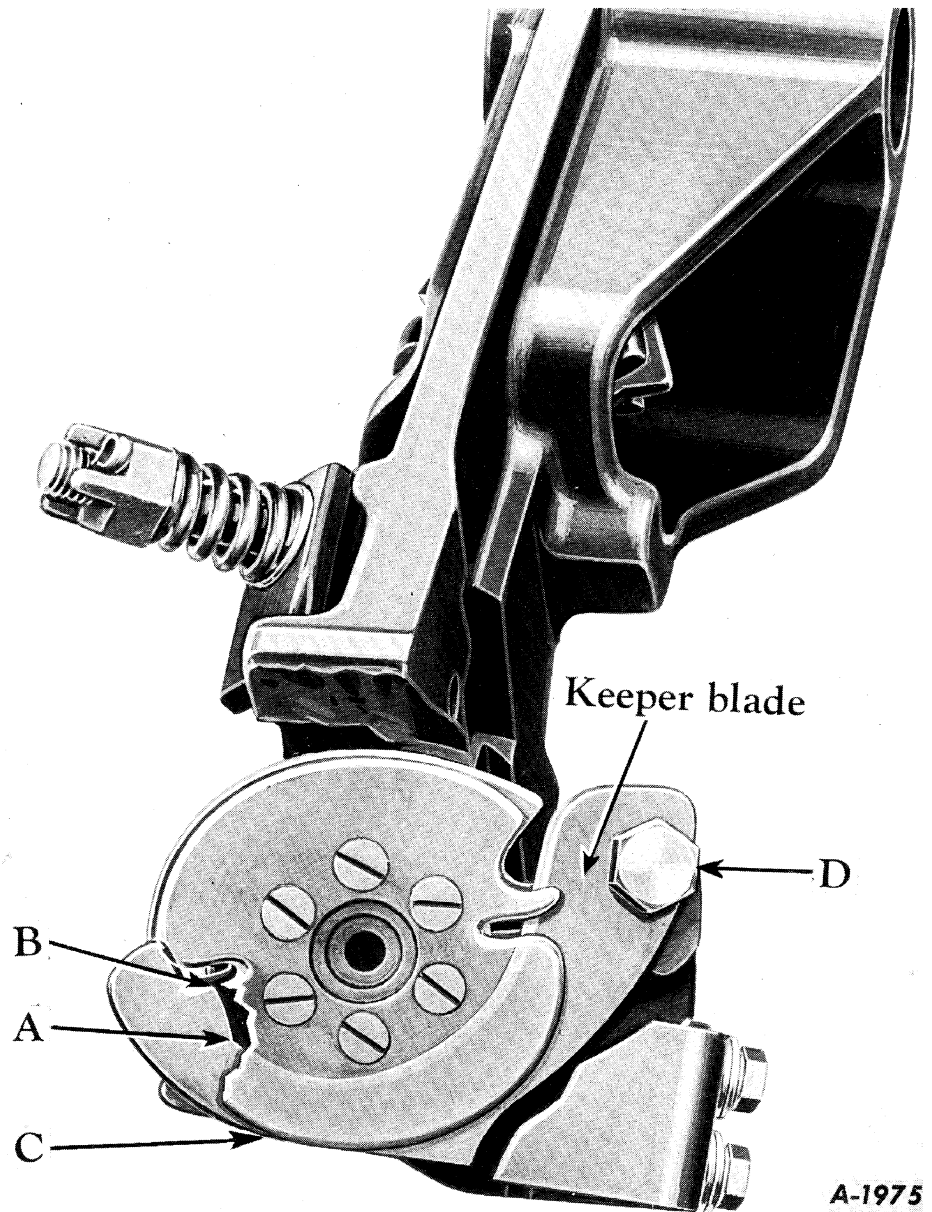


**Blue Ribbon
Service**

**45/46/55/56
Twine and Wire Balers**

**INTERNATIONAL HARVESTER COMPANY
180 NORTH MICHIGAN AVE. CHICAGO 1, ILLINOIS**

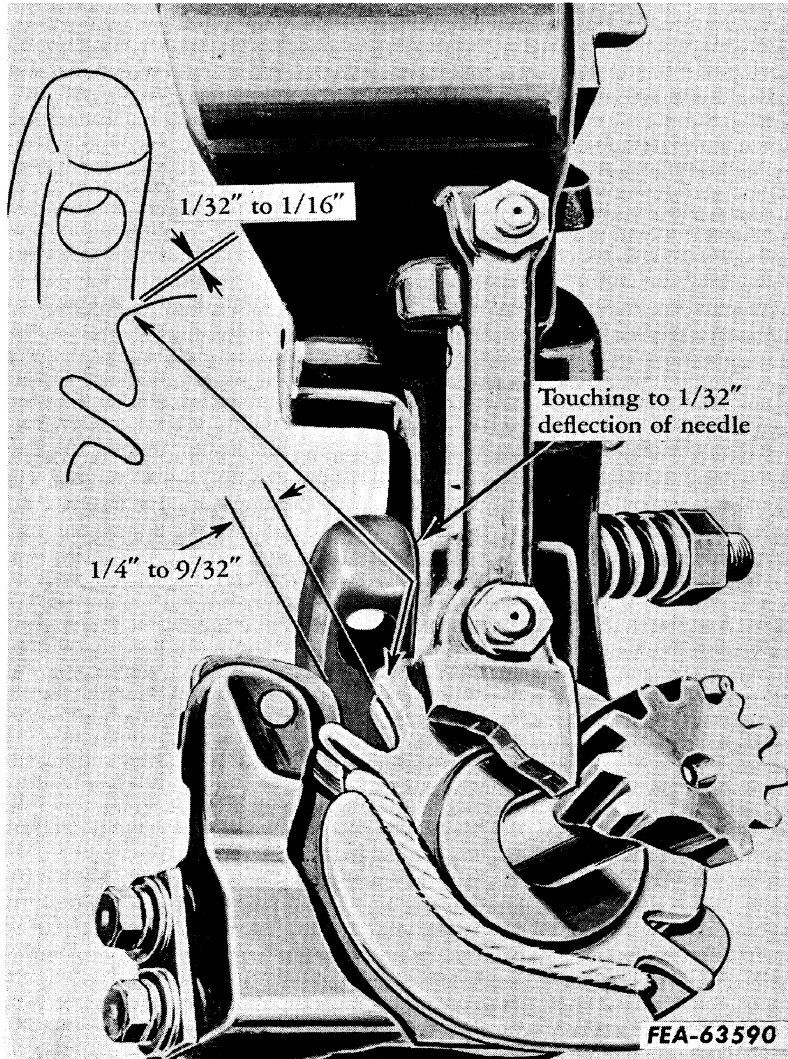
NO. 45 BALER



10. Keeper blade position when loaded with twine.

The lower edge of the keeper blade should be even with the bottom of the twine holder disks at point C.

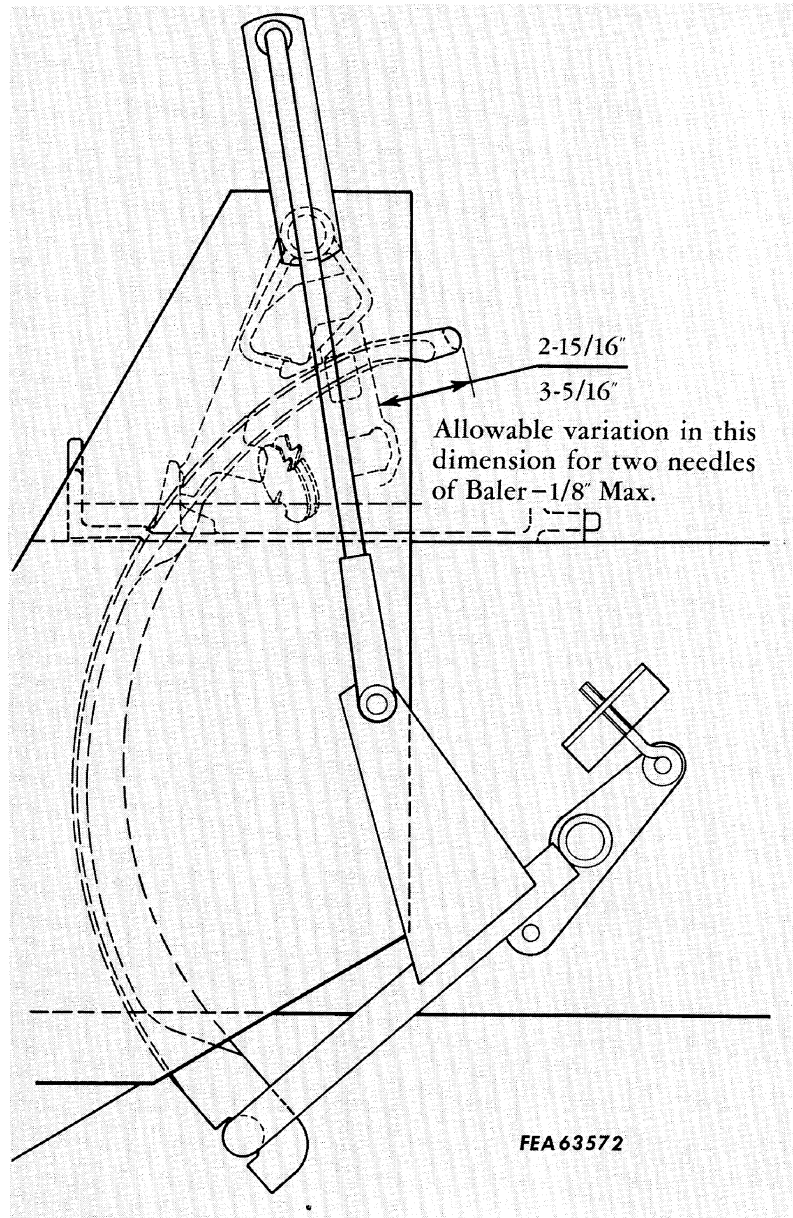
NO. 56-T BALER



4. Relation of needle to knotter frame and needle clearance over the disk.

Make sure the needle clearance over the cord holder is correct and that needle contacts the milled surface of the knotter frame.

NO. 56-T BALER



5. Needle height during the tying cycle.

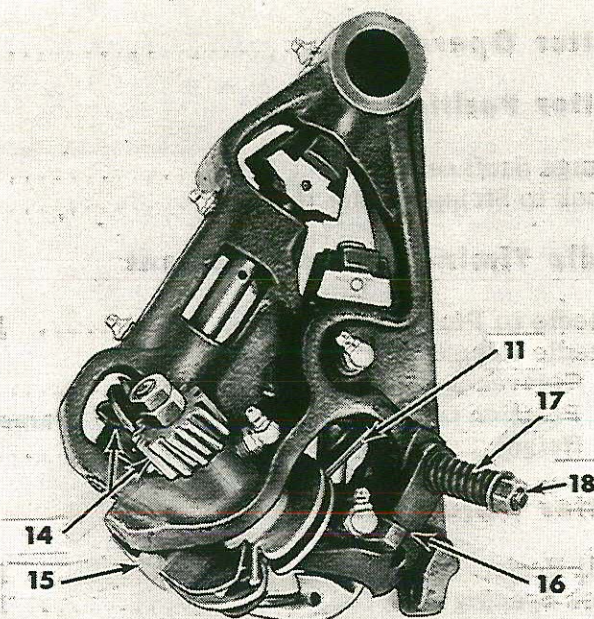
Twine Knotters

**McCormick and
International Balers
Service Manual**

GSS-1335-B

***CASE* III**

KNOTTER NOMENCLATURE



FEA-73178A

1. Knotter frame
2. Twine disk pinion
3. Bill hook pinion
4. Knotter frame gauging surface
5. Keeper blade
6. Twine knife
7. Twine disk assembly
8. Bill hook
9. Bill hook jaw
10. Rear disk
11. Disk cleaner
12. Spacing shims
13. Front disk
14. Disk helical pinions
15. Twine end retainer spring
16. Bill hook closing cam
17. Bill hook closing cam spring
18. Closing cam spring bolt
19. Bill hook opening cam

CONTENTS

Knotter Operation	5
--------------------------------	---

Knotter Position

Gauge Surface to Breast Plate	8, 9
Hook to Stripping Slot Radius	10

Needle Timing and Adjustment

Needle to Plunger Timing	11, 12
Needle Adjustment	
Clearance over disk	13
Position to gauge surface of knotter frame	14
Height	15

Knotter Adjustment

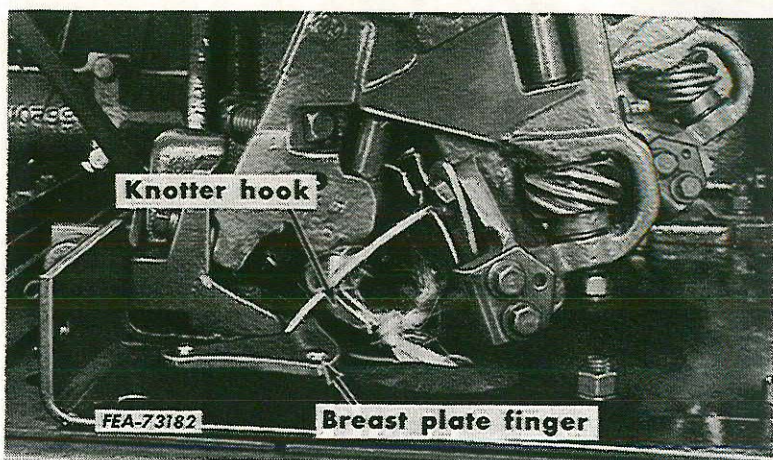
Bill Hook	16-19
Disk Spacing	19-21
Delay Surfaces	22
Disk Timing	23-25
Disk Cleaner	26
Knife Setting	
Timing	27
Height	28, 29
Distance from disk	30
Twine End Retainer Spring	31
Twine Can Tension	32, 33

Custom Long Wear Knotter

Knotter Adjustment	
Knife setting	
Twine knife	34
Knotter position	
Breast plate finger	35
Breast plate insert	36

Trouble Shooting Chart	37-42
-------------------------------------	-------

Knotter Operation



Illust. 4. Tying mechanism in home position; knot being formed as twine strips from knotter hook.

The action of the trip arm releases the clutch drive as the mechanism reaches the home position. In order for the knot to be completed, the baler feeding must continue. This incoming hay pushes the finished bale on through the chamber and the twine around the bale is stripped or pulled off of the bill hook which finishes forming the bale. See Illust. 4.

Knotter Position

The knotters must be positioned correctly to the breast plate, because the breast plate is an integral part of the tying mechanism.

Only two dimensions are needed to correctly locate the knotters.

Gauge Surface to Breast Plate

Left to right location - The milled gauge surface of the knotter frame should be $1/64''$ to $5/64''$ to the left of the needle slot in the breast plate. See Illust. 5.

Adjustment of this dimension is done by shifting washers on the knotter shaft.