



**LIFT
TYPE**

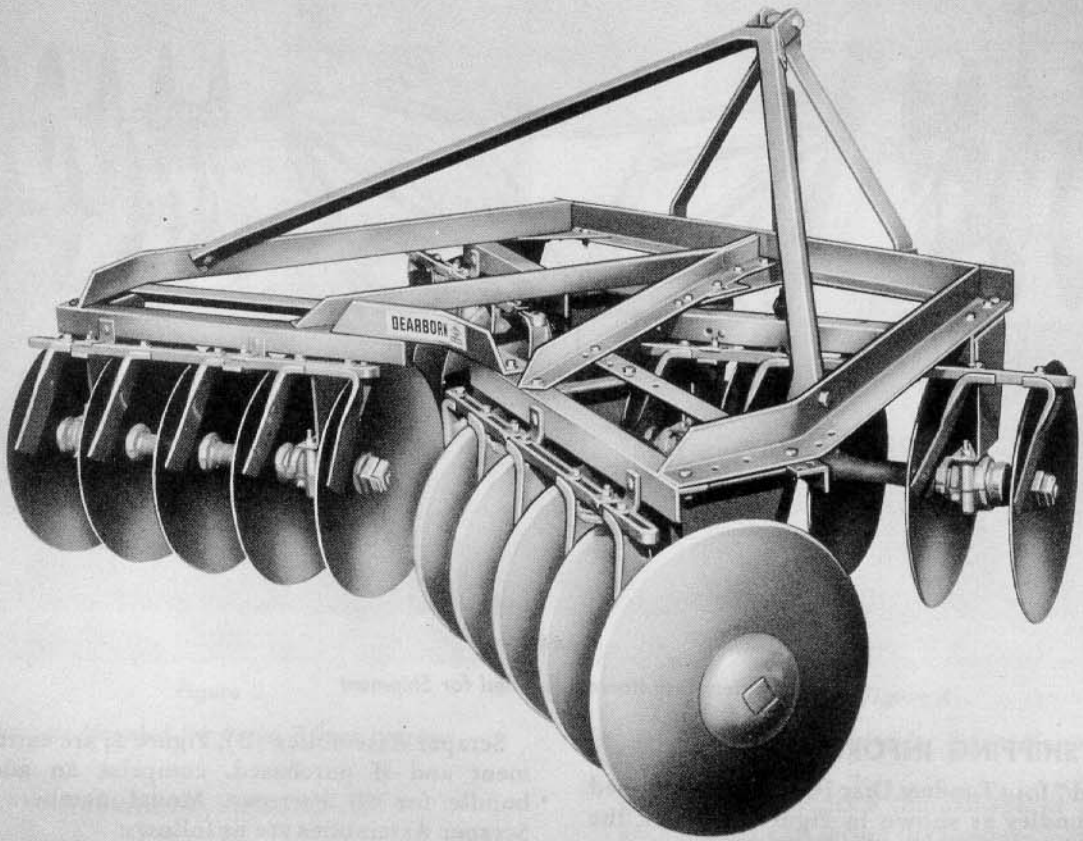
DEARBORN
**TANDEM DISC
HARROW**
SERIES "E"



ASSEMBLY and OPERATING
Instructions

DEARBORN MOTORS CORPORATION — BIRMINGHAM, MICHIGAN

DESCRIPTION



The Dearborn Lift Type Tandem Disc Harrow

The Dearborn Lift Type Tandem Disc Harrow is designed to give the ultimate in performance, economy, and dependability. This harrow conserves your working time, requires less time for attaching, transporting and turning in the fields and servicing. Since the implement is raised or lowered by the Ford Tractor Hydraulic Touch Control, depth can be controlled for faster and more efficient discing. Being a "Lift" type harrow, there is no necessity to stop and straighten out the gangs in the field when crossing grassed waterways or marshy areas that would bog down the ordinary harrow.

The rugged construction of the Dearborn Lift Type Tandem Disc Harrow means a long, useful life for every part. The active bearing surfaces are of chilled

white iron, uniformly hard and resistant to abrasion. The frame, of heavy angle steel, will stand unusual abuse without bending. High carbon steel discs keep sharp longer and resist wear.

The angle of the front and rear gangs may be adjusted independently, so that just the right combination of angles for your particular field are readily available.

Because of its rigid construction, the harrow tends to level the ground as it pulverizes, leaving a smooth seed bed.

The rear gangs are laterally fixed in relation to the front so you are assured that they are always cutting centers and splitting the space between the front discs, even on side hills.

SHIPPING INFORMATION

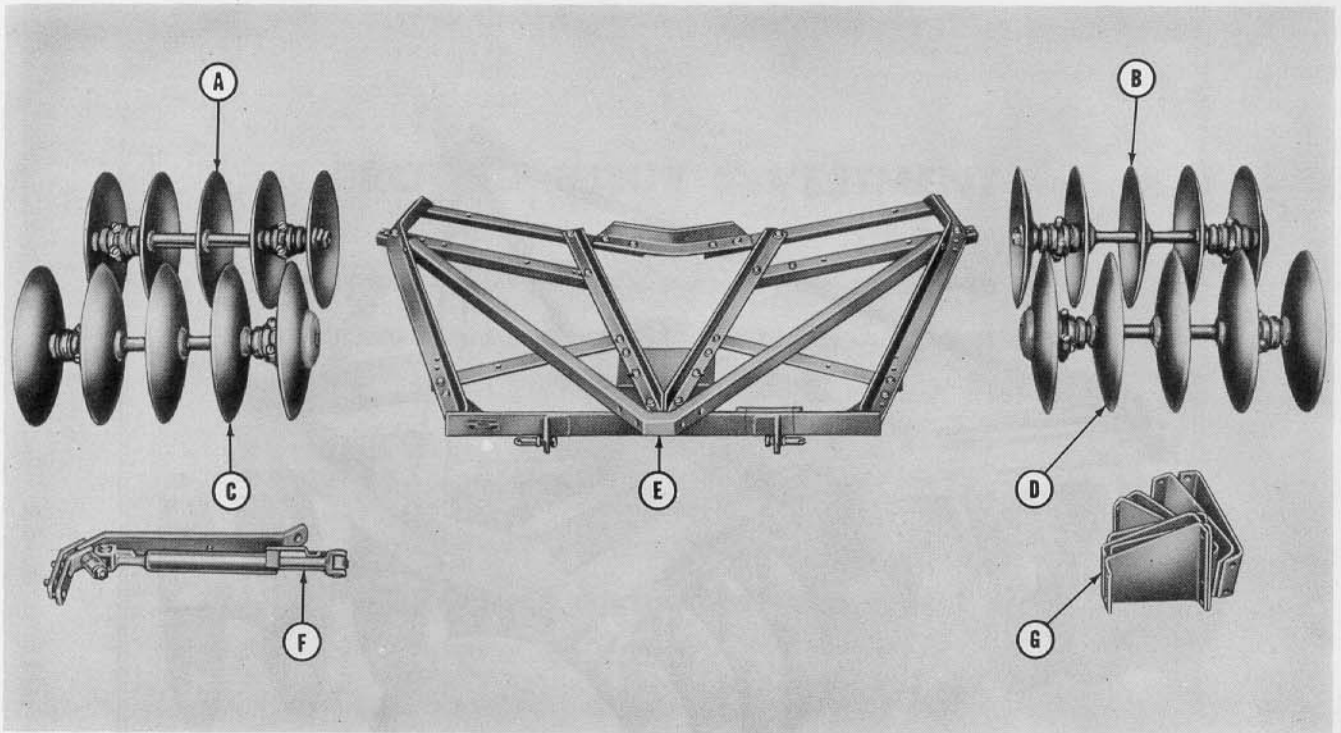


Figure 1

Tandem Disc Harrow Bundled for Shipment

SHIPPING INFORMATION

The 6 and 7 foot Tandem Disc Harrows are shipped in seven bundles as shown in Figure 1. Check the shipment against the following list and Figure 1 to be sure all parts are received.

Model No.	Key	Description	D.M.C. Bundle No.
11-128	A,B,C,D	6' Gangs—16" Discs.....	111806
11-129	A,B,C,D	6' Gangs—18" Discs.....	111807
11-130	A,B	7' Rear Gangs—16" Discs..	111838
	C,D	7' Front Gangs—16" Discs.	111808
11-131	A,B	6' Rear Gangs—18" Discs..	112480
	C,D	6' Front Gangs—18" Cutout Discs.....	111807
*11-132	A,B,C,D	5' Gangs—18" Discs.....	112509
*11-133	A,B	5' Rear Gangs—18" Discs..	112509
	C,D	5' Front Gangs—18" Cutout Discs.....	112510
*11-134	A,B	5' Rear Gangs—20" Discs..	112511
	C,D	5' Front Gangs—20" Cutout Discs.....	112512
(All Models)	E	Main Frame with Support Yoke and Instruction Manual attached.....	112801
(All Models)	F	"A" Frame Struts and Adjustable Top Link.....	112802
(All Models)	G	Four right and four left Disc Gang Hangers.....	112798

*Each of the five foot harrows listed above includes the Frame Adaptor Assembly (D.M.C. Bundle No. 112791) shown at (A), Figure 2.

Scraper Assemblies (B), Figure 2, are extra equipment and if purchased, comprise an additional bundle for all harrows. Model numbers of the Scraper Assemblies are as follows:

- Model No. 11-108—For use on 5-foot harrows.
- Model No. 11-109—For use on 6-foot harrows.
- Model No. 11-110—For use on 7-foot harrows.

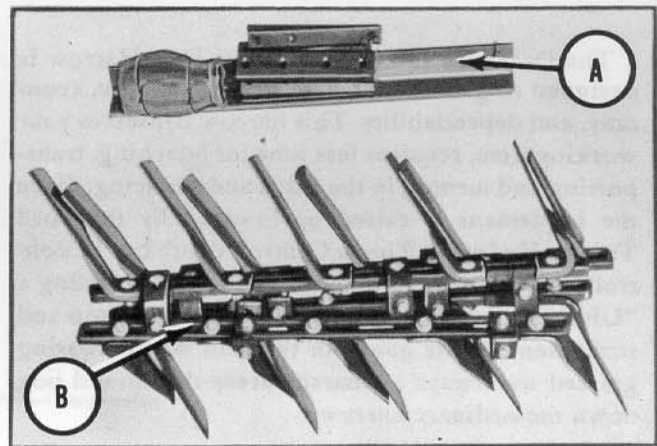


Figure 2

Frame Adaptor Assembly and Scrapers

ASSEMBLY

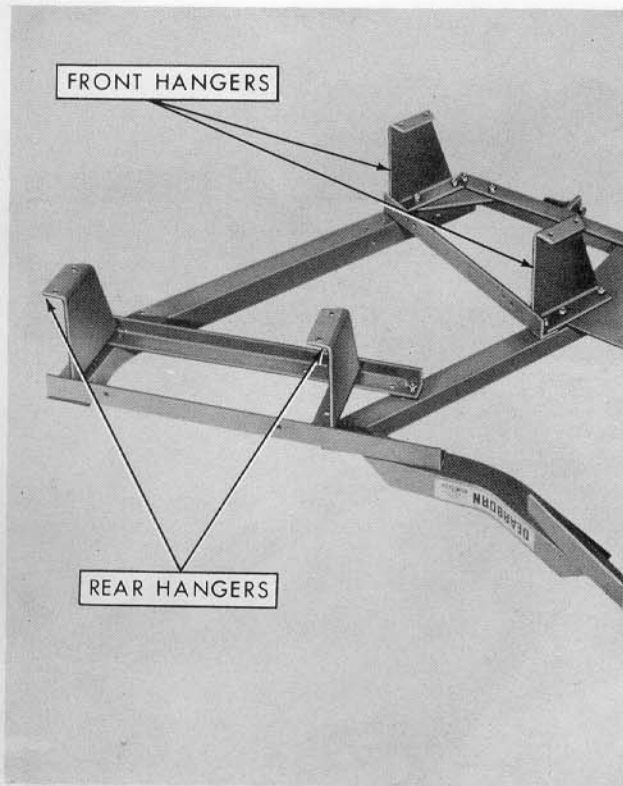


Figure 3

Hangers Mounted for 6 and 7 Foot Harrows

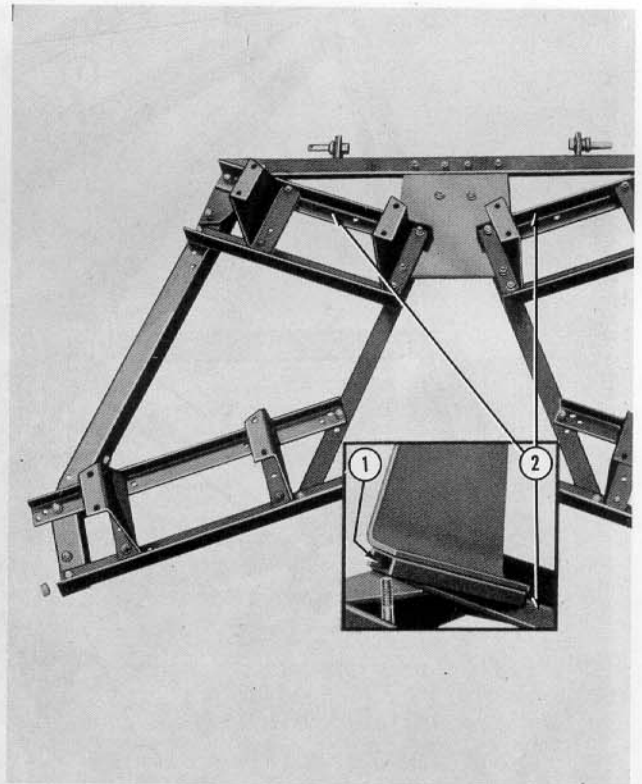


Figure 4

Hangers Mounted for 5-Foot Harrow

ASSEMBLY PROCEDURE

NOTE: *Assembly of the Lift Type Tandem Disc Harrow is the responsibility of the Ford Tractor and Dearborn Farm Equipment dealer. The implement should be delivered completely assembled. The following instructions are provided in case of need.*

1. Cut and remove the wires from the bundles and lay out all the parts to facilitate assembly.
2. Place the main frame on the floor or ground upside down and bolt the eight disc gang hangers in place with the straight edge of each hanger to the rear, as shown in Figure 3. The front hangers should face in and the rear hangers out when properly installed.

FIVE FOOT HARROWS

NOTE: *The following step should be followed when installing disc gang hangers on all five foot harrows.*

Lay out the parts in the frame adaptor kit (A), Figure 2. Attach the additional frame members (2), Figure 4, to support the front of the disc

gang hangers. Place a channel spacer (1) under each hanger and secure the hangers with the nuts and bolts provided.

3. Attach the "A" frame to the harrow frame as follows:
 - a. Turn the frame over so that it rests on the hangers. (See Figure 5.)
 - b. Attach the straps (3) and (4), Figure 5, to the frame support yoke with the four bolts (1), lockwashers and nuts provided.
 - c. Remove the nuts and lockwashers from the link pins and attach the top link brackets (5), Figure 5, as shown at (6) and (9). Replace the lockwashers and nuts and tighten securely.
 - d. Position the free ends of the top link brackets (5), Figure 5, between the support yoke straps (3) and (4). Place the long knuckle on the rear of the adjustable top link (7) between the top link brackets and insert the 4½ inch hex bolt (2) through the assembly. Secure the bolt with the lockwasher and nut provided.

ASSEMBLY

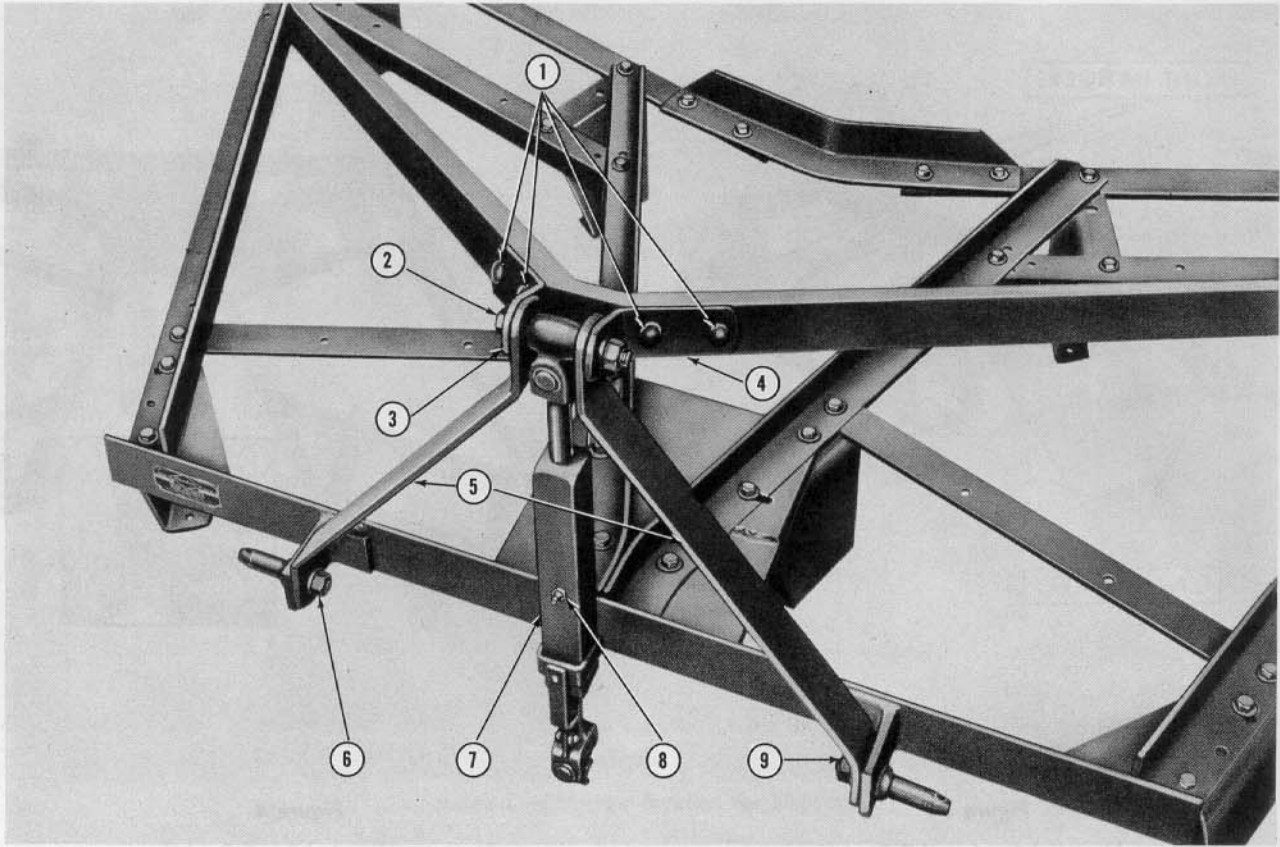


Figure 5

"A" Frame and Top Link Attached

4. Attach the tractor lower right and left links to the link pins of the implement as shown at (2), Figure 6. Secure with the linch pins. Attach the forward end of the adjustable top link in the lower set of holes in the three hole rocker and secure with the pin (1) and linch pin provided. The lock (3), Figure 6, on the adjustable link should be on top when the link is attached.
5. Attach the disc gangs to the harrow frame as follows:
 - a. Start the tractor and raise the main frame with the Ford Hydraulic Touch Control until there is adequate clearance to permit attachment of the gangs.
NOTE: Before the gangs are attached to the hangers, pack the lower half of each disc bearing with grease to insure complete lubrication.
 - b. Attach the disc gangs to the hangers with the bolts (4), Figure 6, lockwashers and nuts, as shown. The lubrication fittings on each gang bearing should face to the rear in order to avoid damage to the fittings. (See Figure 9).
6. If scrapers (B), Figure 2, are to be used on the harrow, attach them to the main frame as shown in Figure 9.

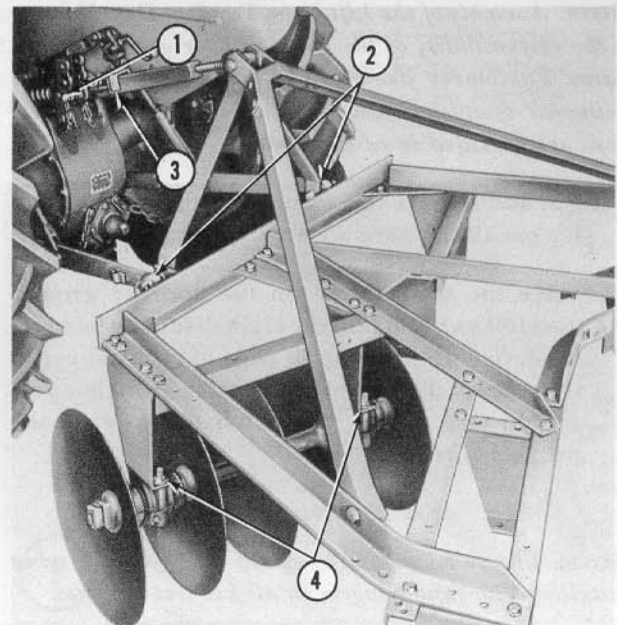


Figure 6

Disc Gangs Attached to Hangers



Figure 7

Lift Type Tandem Disc Harrow at Work

OPERATION

The Dearborn Lift Type Tandem Disc Harrow is an easily operated implement, designed to give satisfactory performance in all types of soil and in a wide variety of cover conditions.

The harrow is ideally suited for operations such as seed bed preparation, turning in cover crops, and cutting up trash. With its wide range of angle adjustment, most surface trash can be easily and thoroughly mulched and better penetration can be obtained. Cutout discs on front gangs are available for use in extremely trashy conditions.

The "lift" feature of the harrow makes it easy to turn at the end of the field, permits crossing grassed waterways without disturbing the sod and protects the cutting edge of the discs when transporting the implement to and from the field.

ADJUSTMENTS

The Dearborn Lift Type Tandem Disc Harrow is designed so that the following adjustments can be easily made.

Top Link: The length of the top link is adjusted by releasing the top link lock and turning the housing. Keep the housing centered between the yokes at all times.

Leveling the Gangs: The rear gangs are leveled in relation to the front gangs by the length of the adjustable top link.

Changing the Gang Angle: Gangs may be individually positioned at angles of approximately ten, fifteen or twenty degrees. The angle to be used is largely determined by the type of soil being worked or by the amount of ridging or furrowing which is encountered. To adjust the angle of the front gangs, loosen the bolts (1), (2), and (3), Figure 8, at the inner end of each front gang. Remove the bolts and nuts from the top of each outer disc hanger and set the gangs at the desired angle. Replace the outer bolts in the proper holes to obtain the desired angle (See Figure 8) and secure with the nuts provided.

To adjust the angle of the rear gangs, loosen the bolts (5), remove the bolt (4) from each rear gang

OPERATION

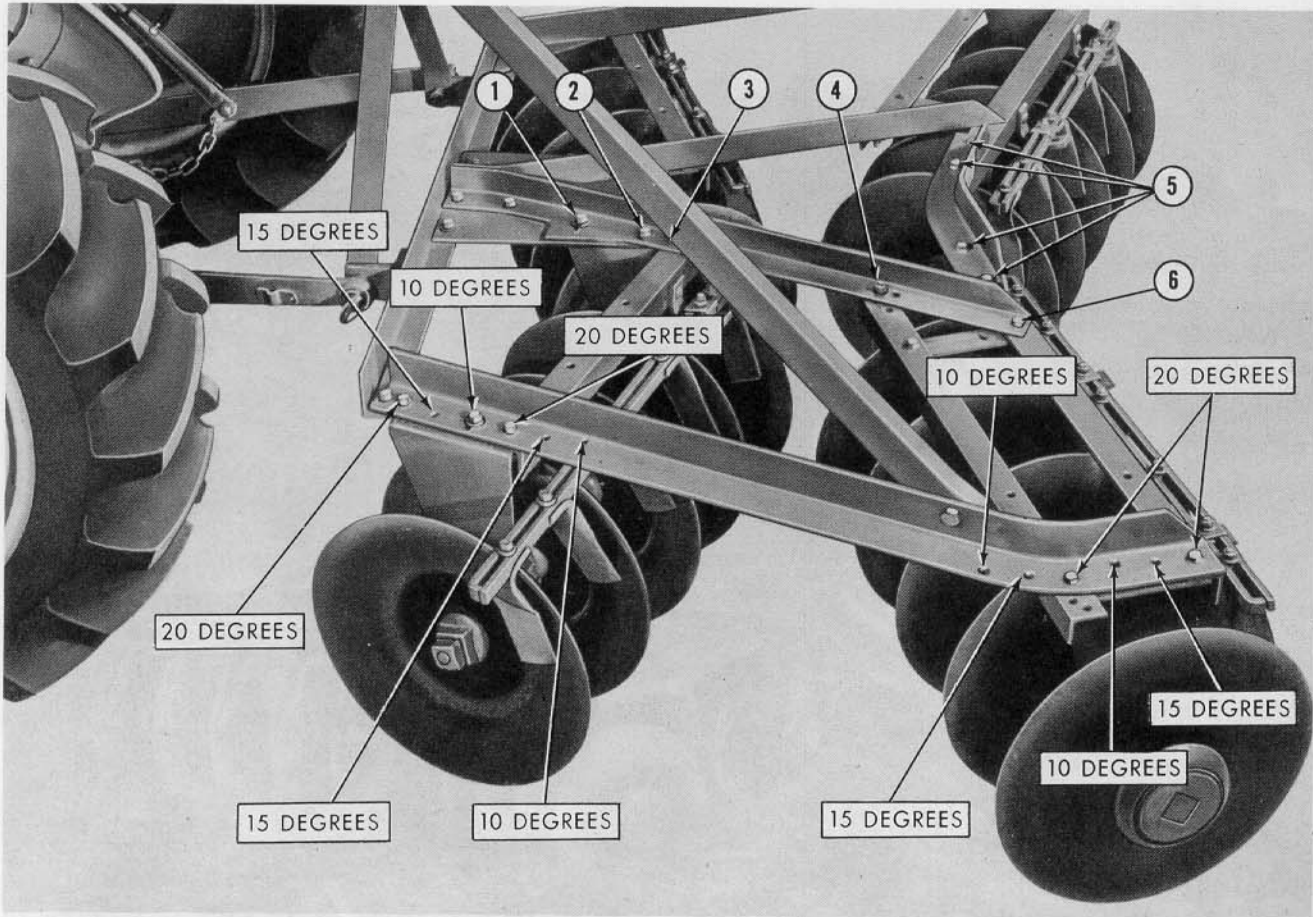


Figure 8

Adjusting the Tandem Disc Harrow

and loosen the bolt (6) on each rear gang. Remove the two bolts located on top of each rear disc outer hanger and position the gangs at the desired angle. Replace all bolts and nuts and tighten securely.

Leveling the Outer Ends of the Disc Gang: To obtain uniform penetration across the width of the implement, use the leveling crank to raise or lower the right hand side of the harrow.

Scraper Adjustments: The scrapers may be adjusted by gangs or individually. Set the points of the scrapers approximately $\frac{1}{8}$ inch from the disc blade and tighten the nuts and bolts securely. (See Figure 9).

Adjusting Rear Gangs to Eliminate Ridging and Furrowing: If excessive ridging is encountered between the inner ends of the rear gangs or if furrowing occurs at the outer ends of the rear gangs, one or more of the following adjustments may be necessary.

- A. Decrease the angle of the rear gangs.

- B. Shorten the adjustable top link.

- C. Decrease the working depth of the implement by lifting it with the Ford Hydraulic Touch Control.

- D. Reduce tractor field speed.

Adjusting Front Gangs to Eliminate Ridging and Furrowing:

If excessive ridging is encountered at the outer ends of the front gangs or if excessive furrowing occurs between the inner ends of the front gangs, one or more of the following adjustments may be necessary.

- A. Decrease the angle of the front gangs or increase the angle of rear gangs.

- B. Lengthen the adjustable top link.

- C. Reduce the depth of the implement by lifting it with the Ford Hydraulic Touch Control.

- D. Reduce tractor field speed.

OPERATION

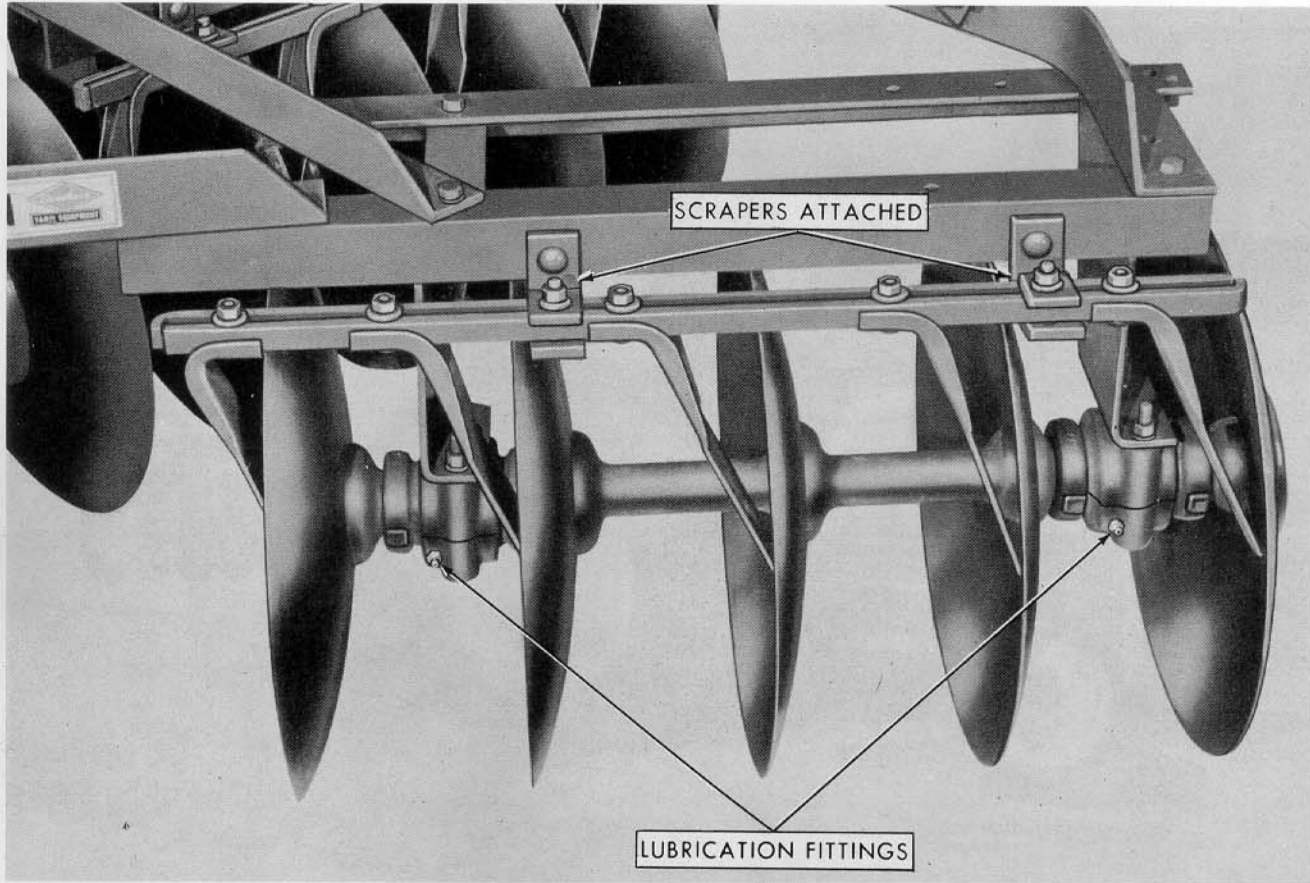


Figure 9

Lubrication Fittings and Scrapers

LUBRICATION

There are nine grease fittings on the Dearborn Lift Type Tandem Disc Harrow. One fitting is located on each of the disc gang bearings as shown in Figure 9, and one on the adjustable top link (8), Figure 5. Lubricate the disc gang bearings after every four hours of operation. The top link should be lubricated once every two weeks. Use a good grade of pressure gun grease and wipe the fittings clean before greasing to avoid forcing dirt into the bearings.

TRANSPORTING

The Dearborn Lift Type Tandem Disc Harrow is easily lifted to transport position with the Ford Tractor Hydraulic Touch Control lever. This lift feature permits easier turning at the ends of the field and provides convenient transportation of the harrow to and from the field.

MAINTENANCE

1. Keep all bolts and nuts tightened securely. Special attention in this respect should be given the implement when it is new.
2. Keep the disc blades sharp so that your Dearborn Tandem Disc Harrow will continue to give good service. Sharp disc blades assure better penetration and trash cutting action.
3. Keep the harrow well lubricated.
4. Use touch-up paint to prevent rust and to maintain the appearance of the implement.
5. Store the harrow in a dry place between operating seasons and coat non-painted surfaces with a good rust preventive.
6. Your local Ford Tractor and Dearborn Farm Equipment dealer stocks genuine Ford Tractor and Dearborn Farm Equipment repair parts. These parts are manufactured and inspected to assure high quality and accurate fit. Insist on genuine Ford Tractor and Dearborn Farm Equipment repair parts.

OPERATION



Figure 10

Transporting the Tandem Disc Harrow

SAFETY PRECAUTIONS

Most farm implement accidents can be avoided by following these simple precautions:

1. Do not permit anyone but the operator to ride on the tractor at any time.
2. Do not permit anyone to ride on the harrow at any time.
3. The operator should never leave the tractor seat while the tractor is in motion.
4. Never make adjustments on the tractor or implement while the tractor is in motion.
5. Always shut off the engine when leaving the tractor, and lower the harrow to the ground.
6. Keep the tractor keys where they are not available to children.

SERVICE PARTS

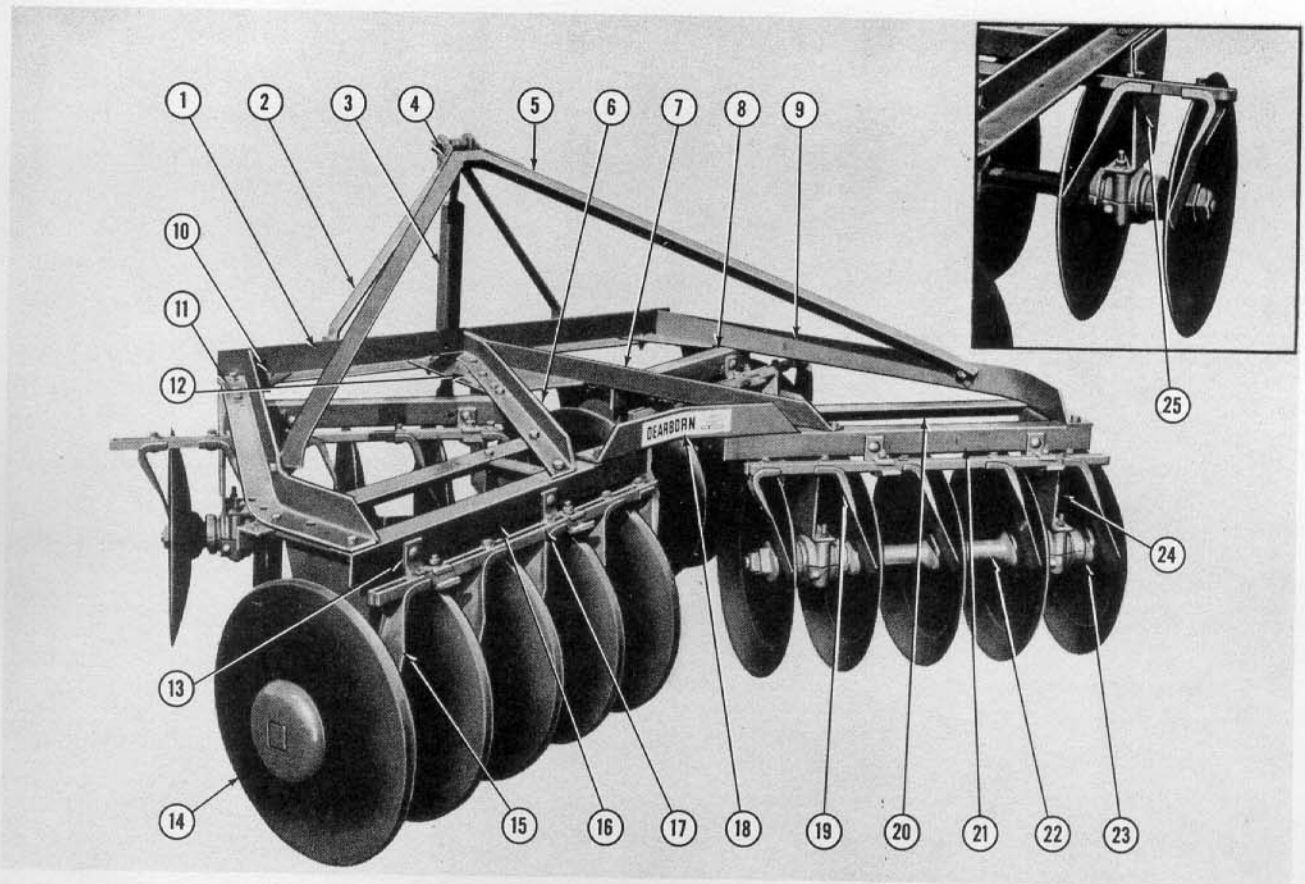


Figure 11

Dearborn Lift Type Tandem Disc Harrow

NOTE: The following part numbers are subject to change and should be checked with your local Ford Tractor and Dearborn Farm Equipment dealer when placing orders.

Item No.	D.M.C. No.	Description	Required	Item No.	D.M.C. No.	Description	Required
1	111810	Bar, Head.....	1	14	112483	Disc, 20" Dia. Notched.....	—
2	111813	Bracket, Top Link.....	2	15	111787	Scraper, Regular, Left.....	—
3	—	Top Link Assembly, Adjustable.....	1		111786	Scraper, Regular, Right.....	—
		(Service component parts separately)		16	112807	Strut, Rear Cross, L.H.....	1
4	111815	Strap, Frame Support.....	2	17	112493	Rail, Scraper, 5'.....	8
5	111814	Yoke, Frame Support.....	1		111783	Rail, Scraper, 6'.....	8
6	111799	Strut, Inner, Left.....	1		111784	Rail, Scraper, 7'.....	8
7	111798	Strut, Inner, Right.....	1	18	112806	Link, Rear Cross Strut.....	1
8	112779	Strut, Cross, Front.....	2	19	111788	Scraper, Special, Right.....	2
9	111800	Strut, Outer, Right.....	1		111789	Scraper, Special, Left.....	2
10	111791	Plate, Frame.....	2	20	111795	Strut, Rear Short.....	2
11	111801	Strut, Outer, Left.....	1	21	112808	Strut, Rear Cross, R.H.....	1
12	112783	Plate, Pivot.....	1	22	111777	Spacer, Disc.....	—
13	111790	Bracket, Scraper Rail.....	8	23	—	Bearing Assembly.....	8
14	111781	Disc, 16" Dia. Plain.....	—			(Service component parts separately)	
	111782	Disc, 18" Dia. Plain.....	—	24	111793	Hanger, Bearing, Left.....	4
	110967	Disc, 18" Dia. Notched.....	—	25	111792	Hanger, Bearing, Right.....	4
	112517	Disc, 20" Dia. Plain.....	—				