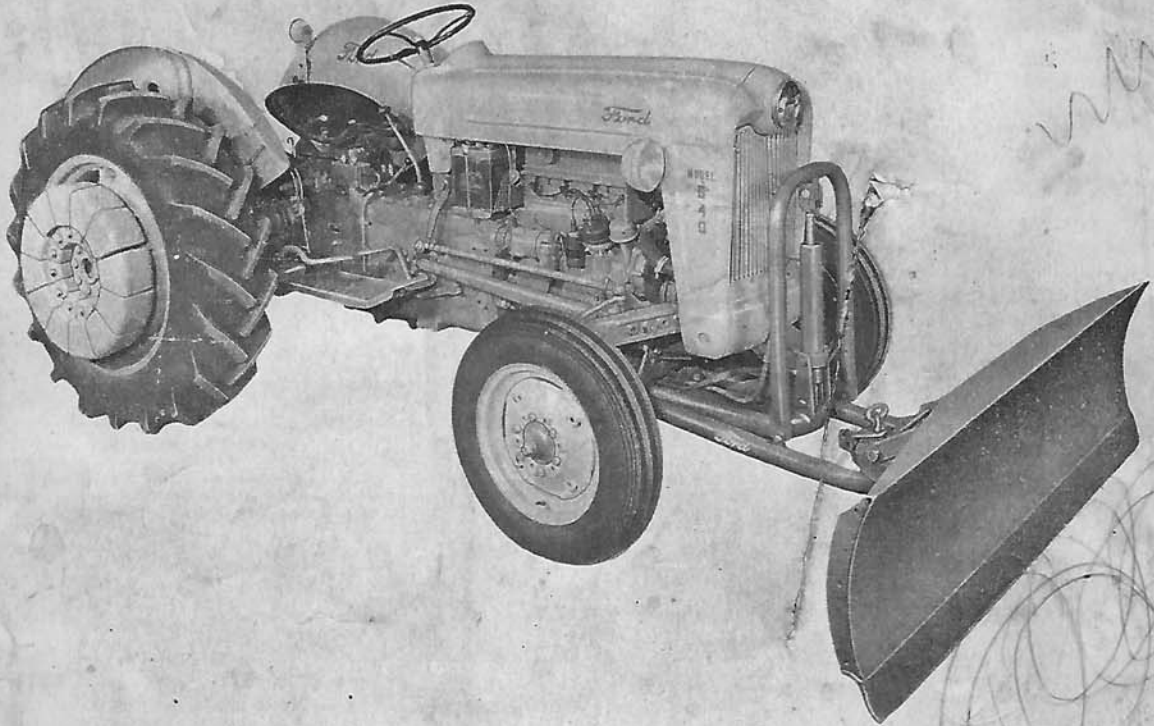


# FORD DOZER FRAME AND ATTACHMENTS



## OPERATING AND ASSEMBLY INSTRUCTIONS



The Ford Dozer Frame, Model 19-80, can be easily mounted to the underside of Series 600-800 and NAA Tractors equipped with standard hydraulic systems. It is designed to accommodate the Angle Dozer, Model 19-2, and Blade Snow Plow, Model 19-3, for use in dozing, leveling, terracing or snow removal operations. One of two methods can be utilized to control the operation of the dozer frame: The Hydraulic Cylinder Control Attachment, Model 19-91, provides a double acting cylinder and accessories for operating the dozer frame in conjunction with a remote control valve and manifold assembly (sold separately). The Hydraulic Cable Control Attachment, Model 19-92, utilizes the tractor lift links to control the operation of the dozer frame. This manual contains complete information on operation, maintenance and assembly

of the dozer frame and the attachments that may be used. Read the instructions carefully, study the illustrations, and keep the manual available for ready reference.

### OPERATION

The Ford Dozer Frame used with either the Angle Dozer or Blade Snow Plow can be controlled by a remote cylinder and valve assembly or by a Hydraulic Cable Control Attachment installed on the tractor lift arm. Either method of dozer control depends upon the operator's knowledge of the implement and how it works. The following information is given on operation, adjustments and maintenance of the dozer frame and its attachments.

Prepared by \_\_\_\_\_

TRACTOR AND IMPLEMENT DIVISION

*Ford Motor Company*

BIRMINGHAM, MICHIGAN

660  
699



# OPERATION

## OPERATING SPECIFICATIONS

TYPE OF DOZER FRAME CONTROL	SERIES 600-800 TRACTORS				NAA TRACTOR			
	Blade Travel	Blade Lift Height	Blade Digging Depth	Blade Transport Height	Blade Travel	Blade Lift Height	Blade Digging Depth	Blade Transport Height
Model 19-91 Hydraulic Cylinder Control 231218 Valve and 231210 Manifold Kit or 231025 Valve and Manifold Kit	28"	18½"	9½"	15"				
Model 19-91 Hydraulic Cylinder Control 231218 Valve and 231216 Manifold Kit or 230952 Valve					20"	20"	8"	12"
*Model 19-92 Hydraulic Cable Control	20"	10½"-18½"	1½"-9½"	15"	20"	12"-20"	0"-8"	16½"

\* The minimum and maximum operating specifications listed above for Model 19-92 Hydraulic Cable Control Attachment are obtained by adjusting the length of the adjusting tube attached to the rear lift link.

## BLADE LIFT MECHANISM REQUIREMENTS

TRACTOR MODELS		SERIES 600-800 TRACTORS		MODEL NAA TRACTORS	
Name	Required	Hydraulic Control	Cable Control	Hydraulic Control	Cable Control
Hydraulic Power Source	1	Tractor Hydraulic System	Tractor Hydraulic System	Tractor Hydraulic System	Tractor Hydraulic System
Control Attaching Kits	1	Model No. 19-91 Hydraulic Cylinder Control	Model No. 19-92 Cable Control	Model No. 19-91 Hydraulic Cylinder Control	Model No. 19-92 Cable Control
Blade Attachments	1	Model No. 19-2 Angle Dozer Blade Model No. 19-3 Blade Snow Plow	Model No. 19-2 Angle Dozer Blade Model No. 19-3 Blade Snow Plow	Model No. 19-2 Angle Dozer Blade Model No. 19-3 Blade Snow Plow	Model No. 19-2 Angle Dozer Blade Model No. 19-3 Blade Snow Plow
Remote Control Valve and Manifold	1	Remote Control Valve Part No. 231218 Manifold Kit Part No. 231210		Remote Control Valve Part No. 231218 Manifold Kit Part No. 231216	
Remote Cylinder	1	Remote Cylinder Part No. 230560 Remote Cylinder Part No. 194669		Remote Cylinder Part No. 230560 Remote Cylinder Part No. 194669	
*Other Hydraulic Control Options		Valve and Manifold Kit Part No. 231025 Implement Mounting Kit Part No. 195375 Hydraulic Remote Control Hose Kit Part No. 231174		Remote Valve Part No. 230952 Implement Mounting Kit Part No. 195375 Hydraulic Remote Control Hose Kit Part No. 231174	

\*NOTE: These parts are no longer available through your Ford Tractor and Implement Dealer, however, they may be used if in owner's possession.

# OPERATION

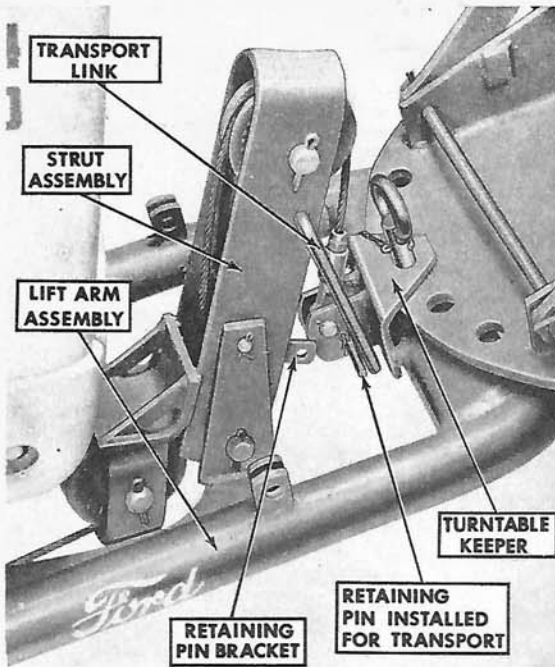


Figure 1  
Blade in Transport Position

## Hydraulic Cylinder Control

To operate the dozer frame lift arm with either the Angle Dozer or Blade Snow Plow attached, move the valve lever (see Figure 9) to the rear to raise the blade and forward to lower the blade. The blade may be stopped at any given point of travel by releasing the valve handle.

**Control Valve Float:** If "float" action is desired when operating the Angle Dozer, the needle valve (see insert, Figure 9), on the right hand side of the valve should be backed off three turns. If "down pressure" is desired the needle valve should be firmly seated.

**CAUTION:** Do not hold the valve lever in the extreme forward or rear position after the blade has reached its full travel in either direction.

**Transport:** With the Hydraulic Cylinder Control it is merely necessary to raise the blade sufficiently clear of the ground for transport purposes.

## Hydraulic Cable Control

To operate the dozer frame lift arm with either the Angle Dozer or Blade Snow Plow attached, move the tractor hydraulic "lift control" lever upward to raise the blade and downward to lower the blade.

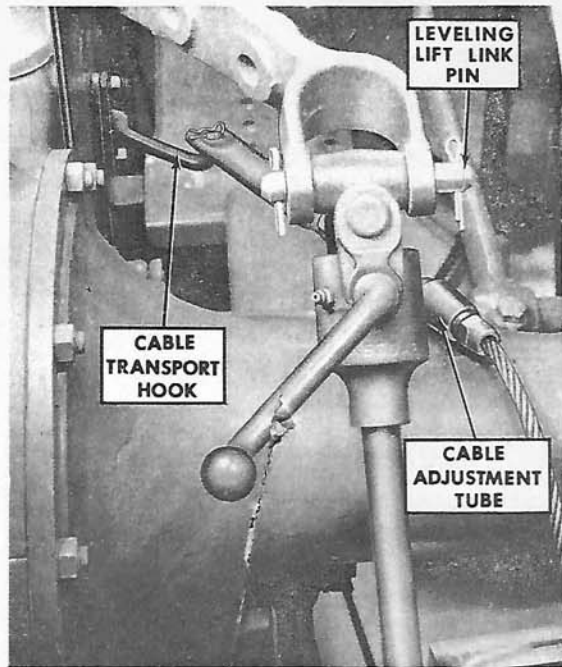


Figure 2  
Hydraulic Cable Attached to Transport Hook

**NOTE:** The tractor hydraulic system should be operated in "Position Control" when raising or lowering the blade with hydraulic cable attachment.

**Transport:** During extended periods of blade transport, it is recommended that the weight of the blade be removed from the Hydraulic Cable Control. A blade transport link and retaining pin are used to suspend the lift arm and attached blade to the dozer frame during transport. Figure 1, shows the blade in transport position and is accomplished as follows:

1. Remove the retaining pin (held with two hair pins) from the strut assembly as shown in Figure 1.
2. Raise the lift arm and attached blade sufficiently to permit the transport link to hook beneath the turntable keeper bracket and install the retaining pin in position with the two hair pins.
3. Relieve the tension on the cable with the tractor hydraulic "Touch Control" lever. The blade, with the cable slack, should now be held in a raised position by the transport link.

To release the blade, raise the lift arm and remove the retaining pin. Swing the transport link back against the strut assembly and secure it in position with the retaining pin and two hair pins.



## OPERATION

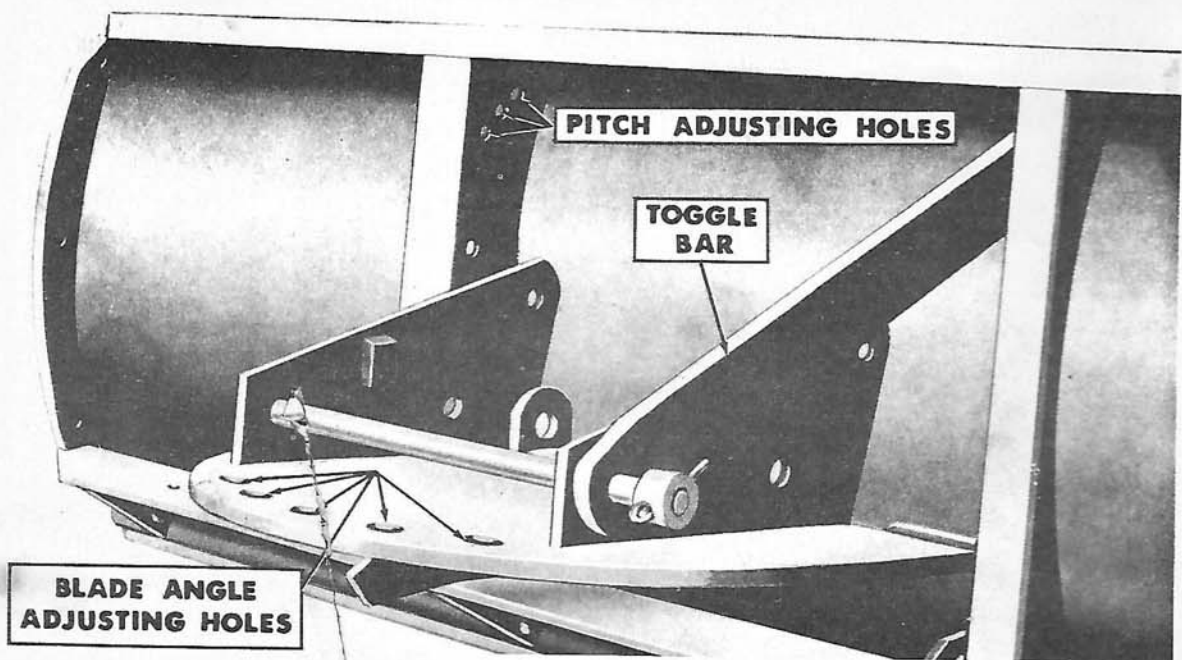


Figure 3  
Angle Dozer Blade Adjustment

**Cable Transport Hook:** If the tractor lift arms are to be used for operating an additional implement, the front mounted blade should first be placed in the transport position as previously described, so that the cable may be released for transport purposes as follows:

1. With the cable slack, remove the cotter pin from the right side of the leveling lift link pin as shown in Figure 2.
2. Remove the cable tube from the pin and position it on the transport hook as shown in Figure 2. Secure the cable tube on the hook with the hair pin as shown. Replace the cotter pin in the leveling lift link pin.

### ADJUSTMENTS

#### Hydraulic Cable Control:

The blade lift height and digging depth shown in the chart on page 2 can be obtained by adjusting the cable assembly at the point of attachment to the rear lift link of the tractor (see Figure 2). To adjust the cable length, disconnect the cable adjustment tube from the lift link, loosen the jam nut and turn the tube to shorten or lengthen the cable for the desired adjustment. Reposition the jam nut tightly against the tube after the adjustment has been made.

#### Angle Dozer Blade:

**Blade Pitch:** The pitch of the blade may be set in three different positions by moving the toggle bars to any of the three holes in the ribs as shown in Figure 3. For normal operations the toggle bars should be set at the center holes in the blade ribs. To increase blade penetration for working hard ground, attach the toggle bars at the top holes.

**Blade Angle:** The blade may be angled to the right or left to aid in moving material to either side. With the blade in a raised position, remove the drop pin and pivot the blade to align the desired adjusting hole in the turntable (Figure 3) with the turntable keeper hole (Figure 5) and reset the drop pin through these holes.

#### Blade Snow Plow:

**Blade Pitch:** The pitch of the blade is adjusted in the same manner as described for the Angle Dozer if the spring kit is not to be used on the blade. With spring kit installed, however, the upper toggle bars must be set at the lower holes in the ribs of the Blade Snow Plow as shown in Figure 4.

**Blade Angle:** The blade is angled to the right or left using the same instructions as outlined for the Angle Dozer.

# OPERATION

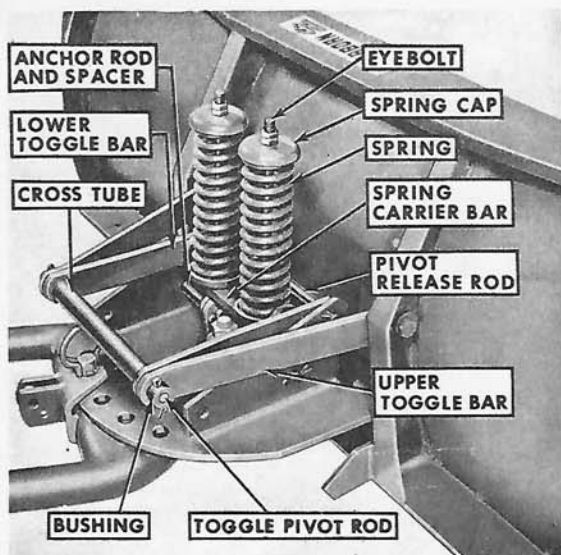


Figure 4

Spring Carrier Assembly Attached to Blade Snow Plow

## ATTACHING AND DETACHING BLADES

The Angle Dozer or Blade Snow Plow is attached to or detached from the dozer lift arm in the same manner as follows:

**Attaching:** With the blade blocked in an upright position, drive the tractor slowly toward the blade turntable until the keeper on the dozer frame lift arm engages the turntable (see Figure 5).

Raise or lower the dozer frame lift arm as necessary for proper alignment.

1. Secure the blade to the lift arm pivot block with the accessory bolt, lockwasher and nut.
2. Raise the attached blade with tractor power and rotate the blade to the desired angle.
3. Insert the drop pin, Figure 5, through the keeper and appropriate turntable hole to lock the blade in position. Lower the blade to the ground.

**Detaching:** Lower the dozer frame lift arm until the blade touches the ground.

1. Remove the accessory mounting bolt, (see Figure 5), lockwasher and nut from the blade turntable and lift arm pivot block.
2. Pull the drop pin, Figure 5, from the turntable keeper. Block the blade in an upright position and back the tractor away from the blade.

## BLADE ATTACHMENTS

Figure 6 shows three attachments available at extra cost for use with the Angle Dozer, Model 19-2. Since the Spring Carrier Attachment is standard equipment on the Blade Snow Plow, Model 19-3, only two of the attachments shown would be used with this blade.

**Skid Shoes:** The Skid Shoe and Bracket Assembly, Part No. 190033, shown installed in Figure 6, can be used on either the Angle Dozer or Blade Snow Plow. These assemblies are supplied with the bolts, pins, washers and nuts necessary for attaching to the blade. The Skid Shoes are adjusted by means of a set screw and serve to hold the cutting lip of the blade at the desired height for cleaning obstructions or leveling operations in loose soil.

**End Plates:** End Plate and Brace Assembly, Part No. 190055, is supplied for use with the Model 19-2 Angle Dozer. Either one or two of these assemblies may be used on the Angle Dozer, depending on the application.

End Plate and Brace Assembly, Part No. 191166, is supplied as a pair for use with the Model 19-3 Blade Snow Plow.

The End Plate Assembly, Part No. 190055, is shown installed on the Angle Dozer in Figure 6. These plates used on either blade type are particularly helpful in moving material where end spilling is not desired. The end plates aid in controlling and handling of greater material quantities. Normally when end plates are used, the blade is not angled.

**Spring Carrier Assembly:** The Spring Carrier Assembly, Part No. 190166, is available as extra equipment for use on the Model 19-2 Angle Dozer and is shown installed in Figure 6. With the Spring Carrier Attach-

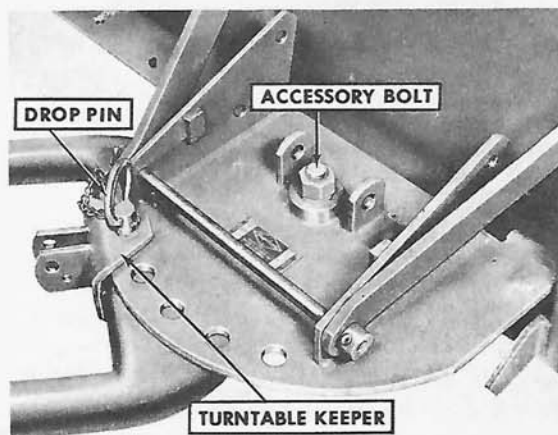


Figure 5

Angle Dozer Attached to Dozer Frame

## OPERATION

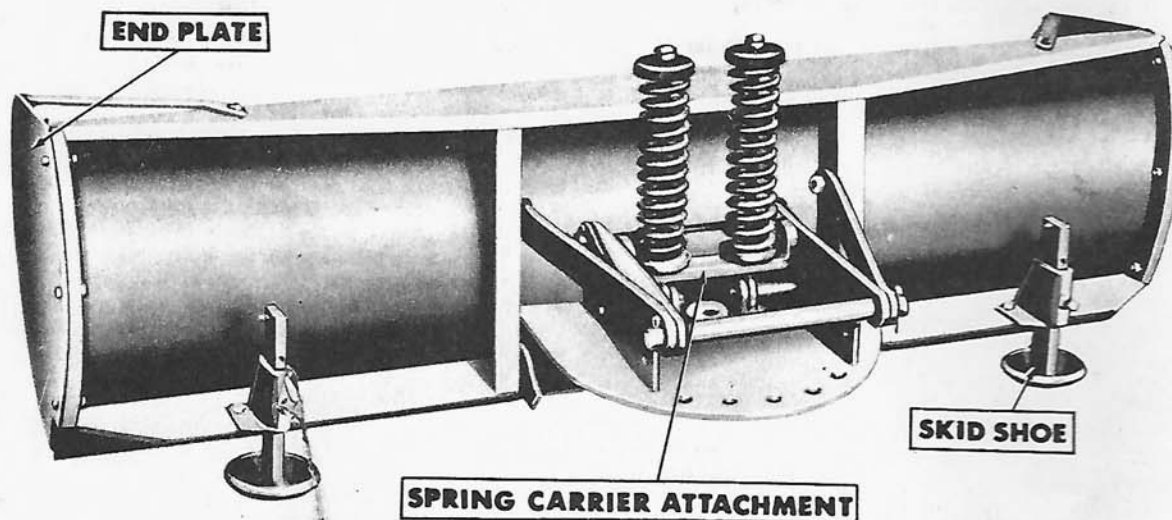


Figure 6  
Blade Attachments Installed

ment, the Angle Dozer may be used for snow removal. The Spring Carrier Attachment permits the blade to "give" somewhat when low obstructions are contacted and affords a safety factor in the protection of both the blade and tractor.

### MAINTENANCE

The following maintenance suggestions are offered for keeping your equipment in a good operating condition.

1. Lubricate the dozer frame lift arm clevis pins frequently.
2. If the Hydraulic Cable Control Attachment is being used for blade control, lubricate the sheave pins frequently.
3. On tractors equipped with the Hydraulic Cylinder Control Attachment, check all hose connections periodically for leaks. Tighten any loose connection. Check the hydraulic tube clamps and tighten as necessary.
4. Clean the blade after each use and cover the cutting lip of the blade with rust preventive.
5. Store the dozer frame and blade in a dry place when not in use. Coat all unpainted surfaces with rust preventive.

### SAFETY PRECAUTIONS

Accidents involving operators of farm and industrial equipment are generally caused by the failure of individuals to observe fundamental safety precautions. A listing of the more timely Safety Rules are given for your reference.

1. Permit only qualified operators to drive the tractor.
2. Always lower the blade to the ground before leaving the tractor.
3. Do not attempt to doze material or remove snow at excessive tractor speeds.
4. Provide adequate warning lights at the rear of the tractor when traveling on highways after dusk.
5. Do not operate the tractor if the equipment or any of the attachments being used are faulty.
6. Never attempt to make adjustments to the tractor or blade while the tractor is in motion.
7. Do not permit anyone to ride on a mounted implement.
8. Keep children away from the immediate area that is being dozed or plowed.
9. Always shut off the engine when leaving the tractor.
10. Do not leave the tractor keys in the ignition when the tractor is not in use.

# SHIPPING

## SHIPPING INFORMATION

**Dozer Frame, Model 19-80:** The Ford Dozer Frame is shipped in a single bundle and consists of the following:

Part No.	Item	Quantity
194769	Frame Assembly	1
194663	Lift Arm Assembly	1
194725	Burlap Bag of Parts	1
<i>Containing:</i>		
194666	Lift Arm Assembly Pin 1 1/8" x 6 5/8"	2
194696	Wire-Keeper	1
190157	Drop Pin Chain	1
301030-S8	Bolt, 1"—8 x 6" hex head	1
34835-S7	Washer 1" diameter lock	1
34678-S8	Nut 1"—8 hex	1
194662	Bolt—3/4"—16 x 1 3/4" hex head drilled	2
45314-S8	Nut—3/4"—16 hex slotted	2
72071-S8	Pin—1/8" x 1 1/2" cotter	2
194758	Clevis Pin—1" x 4 3/4"	1
72073-S8	Cotter Pin 3/16" x 1 1/2"	3
72075-S8	Cotter Pin 1/4" x 1 1/2"	2
SE-6594	A & O Manual	1

**Angle Dozer, Model 19-2:** The Angle Dozer blade is shipped in a single bundle ready for use.

**Blade Snow Plow, Model 18-3:** The Blade Snow Plow is shipped in two bundles and consists of the following:

Part No.	Item	Quantity
190010	Blade Assembly	1
190166	Spring Carrier Assembly	1
<i>(Consisting of)</i>		
190001	Coil Spring	2
190004	Eye Bolt	2
190002	Spring Cap	4
33947-S8	Jam nut 5/8"—18	4
190003	Spring Carrier Release Pivot Rod	1
190007	Eye Bolt Anchor Rod	2
190008	Eye Bolt Spacer	2
72075-S8	Cotter Pin 1/4" x 1 1/2"	6
303290-S8	Bolt 5/8"—18 x 1 1/2"	2
302934-S8	Bolt 5/8"—18 x 2"	2

**Hydraulic Cylinder Control Attachment, Model 19-91:** The Hydraulic Cylinder Control Attachment is shipped in two bundles wired together consisting of the following: Bundle No. 19-91.

Part No.	Item	Quantity
194766	Yoke Assembly	1
194669	Cylinder Assembly	1
194677	Pipe Hydraulic	1
194678	Pipe Hydraulic	1

## Bundle No. 196131:

The following parts are contained in the burlap bag:

Part No.	Item	Quantity
73953-S8	Pin—Clevis 5/8" x 1 3/8"	2
72035-S8	Pin Cotter 1/8" x 1"	2
196009	Spacer—Cylinder	1
20372-S8	Bolt—1/2"—13 x 7/8" hex head	2
34809-S7	Washer—Lock—1/2"	2
195650	Pin 1" x 2 7/8"	1
72073-S8	Pin—Cotter—3/16" x 1 1/2"	2
195365	Hose—3/8" x 12"—Coupling	2
192114	Hose—3/8" x 16 3/8" Coupling	2
192115	Union—Ada <sup>3/4</sup> 3/8"	2
195212	J-Bolt—3/8"—16	1
195211	Clamp—Hydraulic Line	2
34807-S7	Washer 3/8" Lock	2
33799-S8	Nut 3/8"—16 Hex	2
195363	Bracket—Pipe	1
23470-S8	Bolt—3/8"—16 x 1 1/2" Carr.	1
304503	Ell-Street	1

**Cable Control Attachment, Model 19-92:** The Cable Control Attachment is shipped in two bundles wired together consisting of the following: Bundle No. 19-92

Part No.	Item	Quantity
195089	Strut Assembly—Front Sheave	1
195097	Bracket Assembly—Rear Sheave	1

## Bundle No. 196132:

The following parts are contained in the burlap bag bundle:

Part No.	Item	Quantity
195582	Pin—1/2" x 4 15/16"—Drilled	1
72035-S8	Pin—1/8" x 1" cotter	5
194772	Sheave	3
194737	Pin	3
72075-S8	Pin—1/4" x 1 1/2" Cotter	3
195095	Link—Blade Transport	1
195096	Pin—Link Retainer	1
141661	Pin—5/64" x 1 1/2"—Hair	2
195657	Cable Assembly	1
195370	Tube—Cable Adjustable	1
33942-S8	Nut—1/2"—13 Hex Jam	1
195581	Pin—5/8" x 4 3/16" Drilled	1
72037-S8	Pin—3/16" x 1" Cotter	2
74004-S8	Pin—5/8" x 1 13/16" Clevis	1
195101	Hook Assembly—Cable	1



# ASSEMBLY

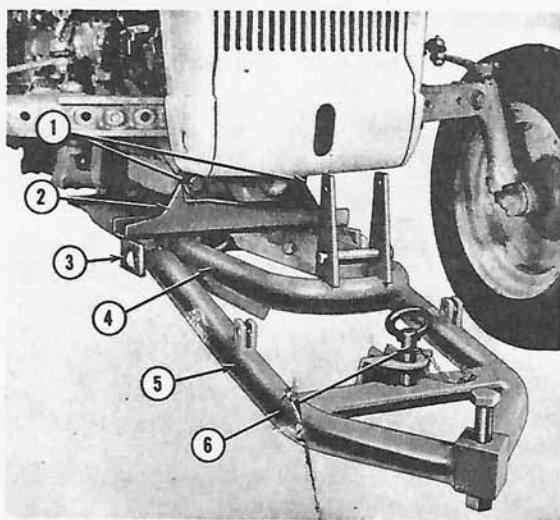


Figure 7  
Dozer Frame Mounted on Tractor

## ASSEMBLY PROCEDURE

NOTE: The assembly of the Ford Dozer Frame and any of the attachments used is the responsibility of the Ford Tractor and Implement Dealer. The following instructions are provided for assembling:

### Dozer Frame, Model 19-80

1. Position the frame assembly (4), Figure 7, on the floor under the tractor.
2. Attach the front of the frame assembly to the engine support with two  $\frac{3}{4}$ " x  $1\frac{3}{4}$ " drilled hex head bolts as shown at (1), Figure 7, and install nuts loosely.

NOTE: The frame assembly front support (2), Figure 7, has two sets of mounting holes, use the top set for attaching the frame assembly to Series 600 and 800 tractors and the lower set for frame installation on NAA tractors.

3. Lift the rear end of the frame assembly into position and secure it to the tractor implement mounting pad with two  $\frac{5}{8}$ " x  $1\frac{1}{2}$ " drilled hex head bolts, and install keeper wire through the drilled holes in the bolts to prevent loosening of the bolts.
4. Secure the front support bolts of the frame assembly with two slotted hex nuts and cotter pins.
5. Install the lift arm assembly (5), Figure 7, on the frame and insert two  $1$ " x  $\frac{65}{8}$ " pins through the lift arm and frame, one on each side as shown at (3), Figure 7. Secure these pins with  $\frac{1}{4}$ " x  $1\frac{1}{2}$ " cotter pins provided.

6. Install the drop pin assembly in the turntable keeper and attach the chain to the frame stiffener and drop pin using two  $\frac{3}{16}$ " x  $1\frac{1}{2}$ " cotter pins as shown at (6), Figure 7.

### Hydraulic Cylinder Control Attachment, Model 19-91

The Hydraulic Cylinder Control Attachment requires the use of a double acting remote control valve attachment available as extra equipment. Valve Kit No. 231218 and manifold Kit No. 231210 are shown installed on the tractor in Figure 9, and may be used on Series 600 and 800 tractor models. For NAA tractors use manifold Kit No. 231216 with valve Kit No. 231218.

With the remote control valve installed on the tractor, assemble the Hydraulic Cylinder Control Attachment to the dozer frame as follows:

1. Position the yoke assembly (3), Figure 8, on the lift arm and install two  $\frac{5}{8}$ " x  $1\frac{3}{8}$ " clevis pins and  $\frac{1}{8}$ " x  $1$ " cotter pins as shown at (7).

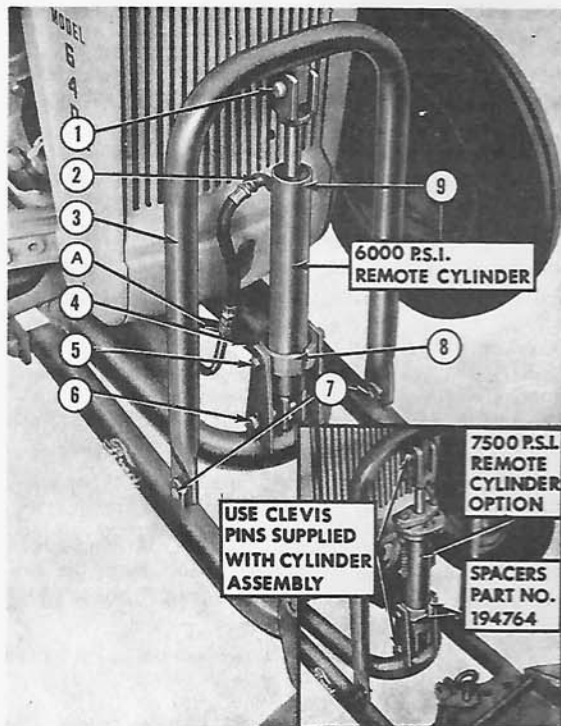


Figure 8  
Model 19-91 Hydraulic Cylinder Control Attachment



## ASSEMBLY

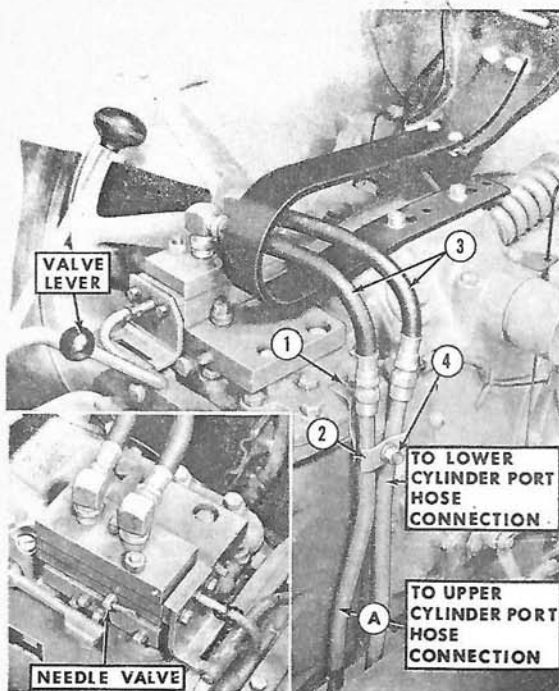


Figure 9

### Hydraulic Tubes and Hoses Connected to Control Valve

2. Place the spacer (8) on the cylinder assembly (9), Figure 8. Secure the cylinder and spacer with two  $\frac{1}{2}$ " x  $\frac{7}{8}$ " hex head bolts (5) and lockwashers.
3. Secure the cylinder assembly at the mounting bracket end with the clevis pin (6), Figure 8, and two  $\frac{3}{16}$ " x  $1\frac{1}{2}$ " cotter pins supplied with the dozer frame.
4. Install the rod end of the cylinder to the yoke with a  $1$ " x  $\frac{27}{8}$ " pin shown at (1), Figure 8, and secure with a  $\frac{3}{16}$ " x  $1\frac{1}{2}$ " cotter pin.
5. Coat the threads of the street-ell (2), Figure 8, with pipe thread sealer and install it in the top cylinder as shown.

NOTE: The remote cylinder assembly, Part No. 194669, shown installed in Figure 8, is rated at 6000 P.S.I. An optional remote cylinder, Part No. 230560 may be used with Implement Mounting Kit No. 195375 and Hose Kit No. 231174 sold

separately (see insert, Figure 8). This cylinder assembly is rated at 7500 P.S.I. and is available at extra cost. Installation of this cylinder is the same as described for the cylinder supplied with the Model 19-91 Hydraulic Cylinder Control Attachment, with the exception that two spacers Part No. 194764 sold separately (see insert, Figure 8) are used, street-ell (2), Figure 8, is not used. Clevis pins are supplied with the cylinder assembly for mounting purposes.

6. Remove the left rear bolt from the tractor hydraulic lift cover and attach the hydraulic pipe bracket (1), Figure 8, at this location with the bolt. Make certain that the  $\frac{3}{8}$ " x  $1\frac{1}{2}$ " carriage bolt (4) is assembled in the bracket in the position shown.
7. Lay the two hydraulic pipes (with the 90° bends together) under the tractor. Pull both pipes up between the left running board, just forward of the rear running board bracket (see Figure 9). Secure the pipes with clamp (2), lockwasher and hex nut.
8. Working from the underside of the tractor, hook a J-Bolt on the rear flange of the dozer frame stiffener plate. Position the J-Bolt at the center line of the Tractor.
9. Secure the two tubes to the J-Bolt using the pipe clamp, lockwasher and hex nut.
10. Install the two  $16\frac{3}{4}$ " hoses (3), Figure 9, to the hydraulic pipes and valve assembly as shown.

NOTE: Reducer Bushing, Part No. 190607,  $\frac{1}{2}$ " to  $\frac{3}{8}$ " may be used as required when  $\frac{3}{8}$ " hoses are used with  $\frac{1}{2}$ " ports on valve 230952.

11. Install the two 12" hoses to the front ends of the hydraulic pipes at "A" and (4), Figure 8, and to the upper and lower cylinder port connections. The hose leading from tube "A", Figure 8, is connected to the upper cylinder port and corresponds to the rear portion of tube "A", Figure 9, that connects to the front port of valve assembly.

NOTE: If the lines are reversed at assembly, the valve action will also be reversed.

# ASSEMBLY

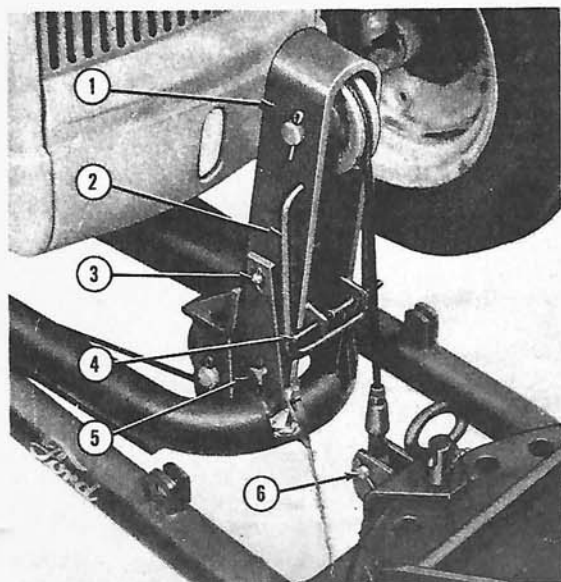


Figure 10  
Hydraulic Cable Control Strut Assembly Installed

## Hydraulic Cable Control Attachment, Model 19-92

With the Dozer Frame installed on the tractor as shown in Figure 7, assemble the Hydraulic Cable Control Attachment as follows:

1. Place the front sheave strut assembly (1), Figure 10, with assembled sheaves in the bracket as shown.
2. Secure the strut assembly in position with the 1" x 4<sup>3</sup>/<sub>4</sub>" clevis pin (5), Figure 10, and secure with <sup>3</sup>/<sub>16</sub>" x 1<sup>1</sup>/<sub>2</sub>" catter pins. Place a <sup>1</sup>/<sub>2</sub>" x 4<sup>15</sup>/<sub>16</sub>" drilled pin (3) through the bracket and strut assembly to lock it in place. Secure with two <sup>1</sup>/<sub>8</sub>" x 1" catter pins.

*NOTE: Prior to installing the cable it will be necessary to remove the sheaves in the strut assembly and rear sheave bracket assembly to provide clearance for the cable eyes.*

3. Thread the cable over the top sheave and under the bottom sheave of the strut assembly (1), Figure 10, and secure the cable eye in the turntable keeper bracket with a <sup>5</sup>/<sub>8</sub>" x 1<sup>13</sup>/<sub>16</sub>" clevis pin and one <sup>1</sup>/<sub>8</sub>" x 1" catter pin as shown at (6).
4. Install the blade transport link (2), Figure 10, in the holes provided in the strut assembly and secure it with two <sup>1</sup>/<sub>8</sub>" x 1" catter pins. Lock it in the position shown with the link retaining pin (4) and two <sup>5</sup>/<sub>64</sub>" x 1<sup>1</sup>/<sub>2</sub>" hair pins placed inside of the brackets.

5. Working at the rear of the tractor, remove the two right hand fender bolt nuts and lockwashers and install the rear sheave bracket assembly on the bolts as shown at (3), Figure 11. Secure the assembly with the nuts and lockwashers.
6. Thread the opposite end of the cable tube through the rear sheave bracket as shown in Figure 11.
7. Remove the leveling lift link pin at (1), Figure 11 and install the cable eye at the right side of the lift arm using a <sup>5</sup>/<sub>8</sub>" x 4<sup>15</sup>/<sub>16</sub>" drilled pin and two <sup>3</sup>/<sub>16</sub>" x 1" catter pins as shown.
8. Install the cable transport hook (2), Figure 11, to the right rear running board bracket using the two bracket bolts and lockwashers provided on the tractor. Place a <sup>5</sup>/<sub>64</sub>" x 1<sup>1</sup>/<sub>2</sub>" hair pin in the hole provided at the top of the transport hook.

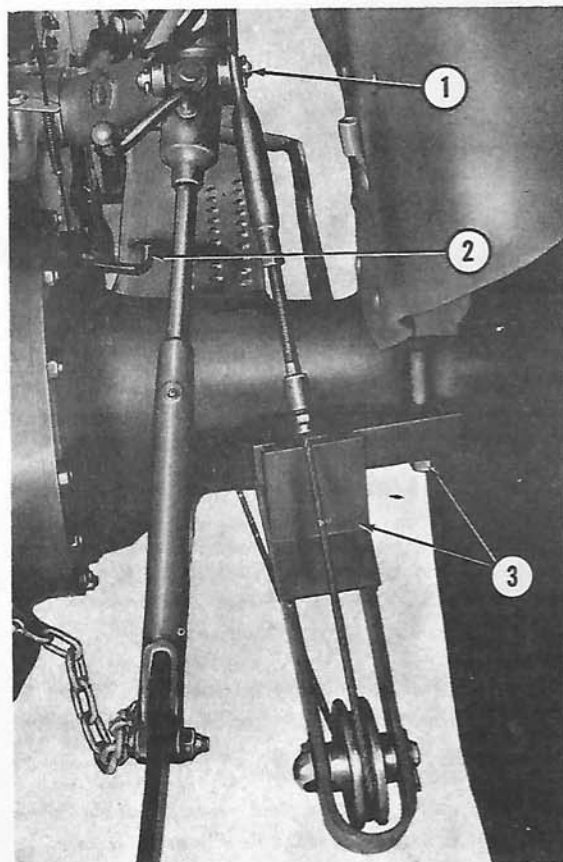


Figure 11  
Cable Control Rear Sheave Bracket Installed

# ASSEMBLY

## Angle Dozer, Model 19-2:

The Angle Dozer blade requires assembly; install the dozer blade as follows:

1. Drive the tractor into position and hook the turntable keeper over the edge of the turntable as shown in Figure 5.
2. Align the accessory mounting bolt holes in the turntable of the blade and pivot block of the lift arm and install the 1" x 6" hex head bolt, lock-washer and hex nut as shown in Figure 5.
3. Place the drop pin through the turntable keeper and the appropriate hole in the turntable for the desired blade angle.
4. Place the spring carrier assembly on the turntable and position the two eyebolts at the outside face of the mounting lugs as shown in Figure 4.
5. Secure the eyebolts in position with the two anchor rods, spacers and cotter pins.
6. Install the pivot release rod through the turntable brackets and spring carrier assembly. Secure the rod at each end with a cotter pin.
7. Tilt the blade as necessary and install the toggle pivot rod through the toggle bars and cross tube of the spring carrier assembly. Secure the rod with the two bushings and cotter pins, one at each end of the rod.

## Blade Snow Plow, Model 19-3:

The spring carrier assembly must be partially disassembled prior to mounting it on the Blade Snow Plow. Refer to Figure 4, for parts identification.

1. Release the pivot rod from the toggle bars of the blade assembly by removing the bushings and cotter pins at each end of the rod. Tilt the blade assembly forward to the stops. Install the upper toggle bars in the lower holes as shown in Figure 4, using the two 5/8" x 2" bolts.
- The Blade Snow Plow with assembled spring carrier is attached to the dozer frame in the same manner as previously outlined for the Angle Dozer, Model 19-2.

## PRE-DELIVERY CHECK LIST

### AFTER IMPLEMENT ASSEMBLY

- Lubricate the dozer frame lift arm pins.
- Lubricate the sheave pins on the mechanical lift control.
- Check all bolts for tightness.
- All pins and cotter pins in place.
- Check all hose connections for leaks if the tractor is equipped with a Hydraulic Cylinder Control Attachment.
- Paint, masking and any other foreign material removed from the valve spool and cylinder.
- Hydraulic fluid checked for proper level.
- Valve assembly is tight to the manifold.
- Blade works freely up and down.
- Blade raises to proper height as listed on page 2.
- Tractor hydraulic system functions properly.

### AT TIME OF DELIVERY

- Operation and adjustments of dozer explained to owner as outlined in this manual.
- All lubrication points pointed out to owner.
- Safety rules and precautions explained to owner.

DATE

DEALER SIGNATURE

at the  
log

