

## FORD HYDRAULIC ATTACHMENTS APPLICATIONS

(DA) Double Acting  
(SA) Single Acting  
(R) Indicates Recommended  
(O) Indicates Optional

SERIES-IMPLEMENT	HYDRAULIC MOUNTING KIT	CYLINDER	HOSE-CYLINDER TO COUPLING	HOSE KIT	REMOTE CONTROL VALVES	
					NAA TRACTORS	4 CYLINDER FORD TRACTORS 1955 TO DATE
101 Plow	10-391* Semi-Mtd. Conv. Kit	W/Kit	W/Kit	W/Kit	None	None
115 2-Way 2-Furrow Plow	None Needed	Supplied W/ Plow	Supplied With Plow	Supplied W/ Plow <sup>◇</sup>	231218 Valve & 231216 Manifold	(R) 311877 (O) 231218 Valve & 231210 Manifold
118 Semi-Mtd. Plow	None Needed	230560 (R) DA	(2) 230522 DA	231450 DA	Not Recommended for these Tractors	Valve Std.
119 2-Way 3-Furrow Plow	None Needed	CBPN-848-A (R) DA	(2) CONN-B968-C	231450 DA	Not Recommended for these Tractors	Valve Std.
204 Wheel Type Disc Harrow for Ford	None	230560 (R) DA 231150 (O) SA	(2) 230522 DA (1) 230522 SA	231450 DA 311684 SA	231218 Valve & 231216 Manifold	(R) 311877 (O) 231218 Valve & 231210 Manifold
204 Wheel Type Disc Harrow for FMD, FPM and FSM	None Needed	231150 (R) SA 230560 (O) SA	Supplied W/ 230955	230955 SA	No valve needed on FMD, FPM or FSM. Valve 311877 may also be used on the FSM.	
311 4-Row Pull Planter	None Needed	230560 (R) DA 106000 (O) DA <sup>φ</sup>	(2) 230522 DA	231450 DA	231218 Valve & 231216 Manifold	311877 (R) 231218 Valve & 231210 Manifold (O)

\* Reducer 358917-S required with FMD or FPM, FSM requires (1) Adapter 200963 and (1) "O" Ring 87039-S91.

◇ Hose Kit supplied with plow requires (1) 311981 Adapter Kit when used with Valves 311877 & CONN-C950-B.

§ Breather Assembly 250225 needed to convert 230560 Cylinder to Single Acting.

φ When using Cylinder Assy. 106000 will also be necessary to use (2) 358919-S Reducers and (2) 311891 Adapter Kit in addition to the (2) 230522 Hoses. If the Cylinder 106000 and Hoses 106139, 106140 or 130358 are available from a Cultivator Hydraulic Lift, 2 each of 231171 Hose and 192021 Coupling may be used for the 311 Planter.

FORD HYDRAULIC ATTACHMENTS APPLICATIONS (CONT.)

(DA) Double Acting  
(SA) Single Acting  
(R) Indicates Recommended  
(O) Indicates Optional

SERIES -IMPLEMENT	HYDRAULIC EQUIPMENT MOUNTING KIT	CYLINDER	HOSE-CYLINDER TO COUPLING	HOSE KIT	NAA TRACTORS	REMOTE CONTROL VALVES	
						4 CYLINDER FORD TRACTORS 1955 TO DATE	6 CYLINDER 6000 SERIES FORD TRACTORS
402, 403, 404, 405 Frt. Mtd. Cult. Selective & Delayed Lift	13-139 or 13-221	Supplied W/ 13-139 or 13-221	Supplied with 13-139 or 13-221	(2) 309574 4 Cyl. (1) CONN-C920A (1) CONN-C921A 6 Cyl.	Not Adaptable to NAA Tractors	311877 & 231384 Selector Valve	Std. Valve & CONN-C919-A Valve Kit
403, 404, 405 Frt. Mtd. Cult. Delayed Lift	13-140 or 13-222 (4 Cyl.) 13-221 (6 Cyl.)	Supplied W/ 13-140, 13-221 or 13-222	Supplied With 13-140, 13-221 or 13-222	(1) 309574 4 Cyl. (1) CONN-C949A 6 Cyl.	Not Adaptable to NAA Tractors	311877	Valve Std.
411 One Row Cult.	13-169 or 13-223	Supplied W/ 13-169 or 13-223	Supplied With 13-169 or 13-223	309574	Not Adaptable to NAA Tractors	311877#	Not Adaptable to 6000 Tractors
412 Frt. Mtd. Cult. Selective & Delayed Lift	13-175	Supplied W/ 13-175	Supplied With 13-175	(2) 309574 4 Cyl. (1) CONN-C920A (1) CONN-C921A 6 Cyl.	Not Adaptable to NAA Tractors	311877 & 231384 Selector Valve	Std. Valve & CONN-C919-A Valve Kit
412 Frt. Mtd. Cult. Delayed Lift	13-175	Supplied W/ 13-175	Supplied W/ 13-175	(1) 309574 4 Cyl. (1) CONN-C949A 6 Cyl.	Not Adaptable to NAA Tractors	311877	Valve Std.
508 Semi-Mtd. Side Delivery Rake	14-216	148956 SA	Supplied W/ 149027	149027φ	231218 Valve & 231216 Manifold	(R) 311877 (O) 231218 Valve & 231210 Manifold	Valve Std.
510 Hay Conditioner	14-211 Hyd. Lift	148956 (R) SA 231150 (O) SA 230560 (O) SA§	Supplied W/ 149027 (1) 230522	149027φ 311684	231218 Valve & 231216 Manifold	311877 (R) 231218 Valve & 231219 Manifold (O)	Valve Std.

Also please use chart below as the Hay Conditioner Requires the following extra hoses and fittings with each different cylinder and hitch as indicated below:

CYLINDER	PULL TYPE HITCH	SEMI-MTD. HITCH
148956	(1) 100809 Hose (1) 240787 Coupling, 1/4"	(1) 149028 Hose (1) 240787 Coupling, 1/4"
231150 & 230560	(1) 231170 Hose (1) 358919-S Adapter (1) 240787 Coupling, 1/4 (w/231150) (1) 240788 Coupling, 1/2(w/230560)	(1) 149028 Hose (1) 240785 Reducer, 1/2 x 1/4 (1) 240786 Bushing, 1/2 x 1/4

# When Valve 311877 is used on Offset Tractors, Special Handle 312848 is required.  
φ Hose Kit 149027 requires (1) 311891 Adapter Kit when used with Valves 311877 & CONN-C950-B.  
§ Breather Assembly 250225 needed to convert 230560 Cylinder to Single Acting.

FORD HYDRAULIC ATTACHMENTS APPLICATIONS (CONT.)

(DA) Double Acting (R) Indicates Recommended  
(SA) Single Acting (O) Indicates Optional

SERIES-IMPLEMENT	HYDRAULIC EQUIPMENT MOUNTING KIT	CYLINDER	HOSE-CYLINDER TO COUPLING	HOSE KIT	REMOTE CONTROL VALVES		
					NAA TRACTORS	4 CYLINDER FORD TRACTORS 1955 TO DATE	6 CYLINDER 6000 SERIES FORD TRACTORS
603 Corn Picker Pull Type	163967	230560 (R) DA 194669 (O) DA	(2) 230522 DA	231450	231218 Valve & 231216 Manifold	(R) 311877 (O) 231218 Valve & 231210 Manifold	Valve Std.
605 Forage Harvester	None Needed	148956 (R) SA	Supplied with 149027	149027φ	231218 Valve & 231216 Manifold	(R) 311877 (O) 231218 Valve & 231210 Manifold	Valve Std.
607 Combine	163965	148956 (R) SA 230560 (O) SA\$ 231150 (O) SA 194669 (O) SAΔ	230522 with 311684 Only	149027φ or 311684	231218 Valve & 231216 Manifold	(R) 311877 (O) 231218 Valve & 231210 Manifold	Valve Std.
612 Forage Harvester	None Needed	230560 DA 231150 SA	(2) 196083 (1) 196083	231450 DA 311684 SA	231218 Valve & 231216 Manifold	311877 (R) 231218 Valve & 231210 Manifold.	Valve Std.
701 Standard Loader	None Needed	None Needed	None Needed	Supplied W/Loader	231218 Valve & 231216 Manifold	(R) 311877 (O) 231218 Valve & 231210 Manifold	Not Adaptable to 6000 Tractors
705 Dozer Frame	19-91 195375	194669 Supplied with 19-91 230560 (O) DA	Supplied with 19-91 (2) 230522	Supplied with 19-91 231450	231218 Valve & 231216 Manifold	(R) 311877 (O) 231218 Valve & 231210 Manifold	Not Adaptable to 6000 Tractors
711 Farm Loader†	None Needed	None Needed	None Needed	Supplied W/Loader	231218 Valve & 231216 Manifold	(R) 311877†	Not Adaptable to 6000 Tractors
902 100 Rotary Cutter	221757 Support Kit	230560 DA 231150 SA	(2) 230522 & (2) 196083 (1) 230522 & (1) 196083	231450 DA 311684 SA	231218 Valve & 231216 Manifold	(R) 311877 (O) 231218 231210 Manifold	Valve Std.
906 84" Rotary Cutter	None Needed	230560 DA 231150 SA	(2) 230522 & (2) 196083 (1) 230522 & (1) 196083	231450 DA 311684-SA	231218 Valve & 231216 Manifold	(R) 311877 231218 Valve & 231210 Manifold (O)	Valve Std.

φ Hose Kit 149027 requires (1) 311891 Adapter Kit when used with Valves 311877 & CONN.-C950-B.  
 § Breather Assy. 250225 needed to convert 230560 Cylinder to Single Acting  
 † On Dexta Tractors only the 311877 Valve is recommended. On 8N Tractors the Holddown Kit 309600 is required. A Holddown Kit 309600 and Adapter Kit 311891 may be used in place of the Remote Control Valve on NAA and all 4 Cylinder Ford Tractors from 1955 to date. For convenience in removing the Loader from all Tractors the following quick disconnect coupler parts are recommended: (1) 304007 Nipple, (1) 195204 Coupling, 3/8 Female, (1) 195205 Coupling, 3/8 Male.

Δ Cylinder 194669 requires (1) 358919-S Reducer

## REMOTE CONTROL VALVE #311877

### Tractors Application:

600 - 700 - 800 - 900 - 601 - 701 - 801  
901 - 1801 - 2000 - 4000 - 4040 - Dexta -  
FSM

Also 501 when equipped with special  
control handle #312848 shown at right.

### Characteristics:

Control lever is located adjacent to touch  
control lever for right-hand operation.

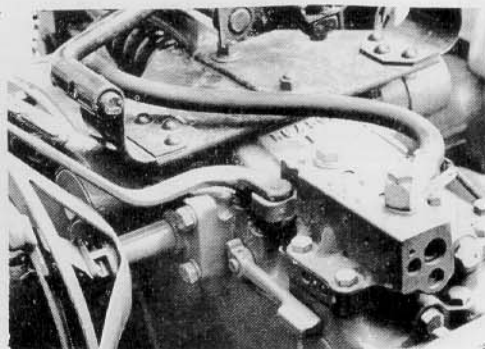
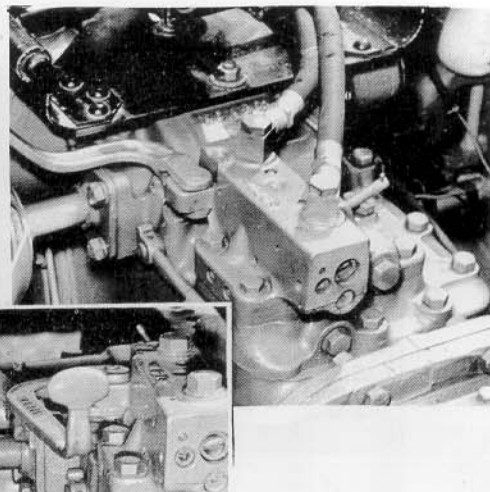
Lever locks into position for actuating cylinder. This frees operator's hand for other uses. Ideal for applications requiring full stroke of cylinder. When cylinder reaches end of stroke, valve is automatically returned to neutral. When used with the selective lift valve to operate the remote cylinders to lift the front gangs of a front mounted cultivator, the delayed lift of rear gangs is provided by touch control lever.

Float action of the remote cylinder is provided by adjusting screw on left side of remote valve.

Single acting cylinder can be used by connecting hose from cylinder to front port and sealing rear port by using either Bolt #371433-S8 and Seal #231237 or capped hose.

### Connection to Hose:

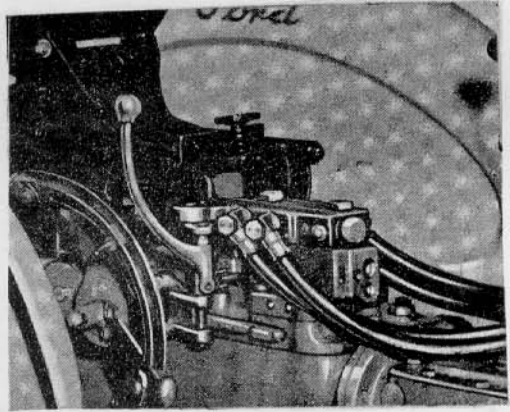
Three ports, two located in top of valve for cylinder actuated by valve, one at front of valve for cylinder actuated by touch control lever. Ports have 9/16" - 18" female straight threads and require .625" I. D. banjo type fitting with special Bolt #311113, two "O" Rings #313675 and two "O" Rings #87032-S91 which are included with current hose kits or for prior hoses with threaded ends use banjo type Adapter Kit #311891 having 3/8" - 18" female tapered pipe thread for hose connection. One kit required per hose.





**DELAYED AND SELECTIVE LIFT ADAPTOR VALVE #231384**

Used in conjunction with Remote Control Valve #311877 for controlling two double action remote cylinders together or individually. For example, this valve permits selective lift of the right or left gangs of a front mounted cultivator.

**Characteristics:**

Single lever controls both cylinders.

The lever is located adjacent to the Tractor Touch control lever for convenient right-hand operation.

Lever must be manually held while cylinder is being released.  
Valve returns to neutral when lever is released.

**Connection to Hoses:**

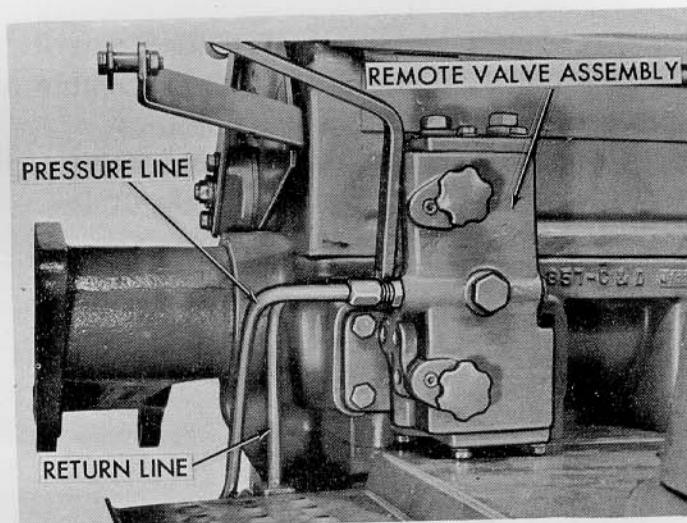
Four ports, two located in each side of valve, have 9/16" - 18 straight threads and require .625 I.D. banjo type fitting for hose connection.

Use hose equipped with .625 I.D. banjo fitting with special Bolt #311113, two "O" Rings 313675 and two "O" Rings #87032-S91 or for hoses with threaded ends use Adapter Kit #311891 having 3/8-18 female tapered pipe thread for hose connection. One kit required per hose.

## REMOTE CONTROL VALVE CONN-B950-B

### Tractor Application

Standard on 6000 Series



### Characteristics

The control handle is located near the tractor touch control lever. This valve can actuate either one single acting or one double acting cylinder. Moving the handle to the rear actuates the front port in the valve and moving the lever to the front actuates the rear port. In double acting operation handle will "hold" itself in either position and return to neutral when the cylinder stroke is completed. Feathering of valve can be accomplished easily by lightly touching the handle in the direction desired.

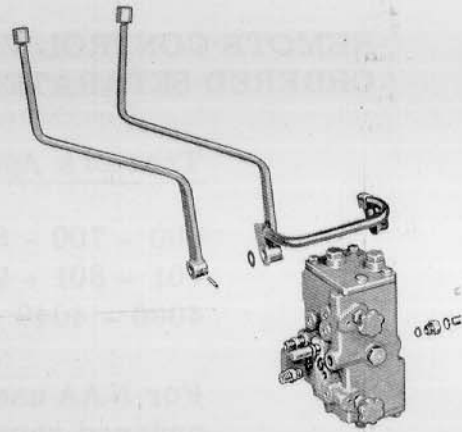
Two metering valves provide an adjustment for rate of hydraulic action. The upper metering valve controls the rate of oil delivery to the remote cylinder. The lower valve controls the rate of oil return from the remote cylinder. Turning the knob clockwise will slow the action.

### Connection to Hose:

Ports have 9/16 - 18 female straight threads and require .625" I.D. banjo type fitting with special Bolt #311113, two "O" Rings 313675 and two "O" Rings #87032-S91 which are included with current hose kits or for prior hoses with threaded ends use banjo type Adapter Kit #311891 having 3/8"-18 female tapered pipe thread for hose connection. One kit required per hose.

## DELAYED AND SELECTIVE LIFT FOR 6000

A second Remote Control Valve Kit, CONN-C919-A used in conjunction with the standard Valve Assembly, CONN-B950-B allows the operator to control two double action cylinders together or individually. This will allow the selective lift of the right or left gang of a Front Mounted Cultivator.

Characteristics:

Two new handles are furnished with the Second Remote Control Valve Kit. The original handle is then replaced with one of the new handles. Both handles are then in a convenient position for the operator. The Second Valve (CONN-B950-D) is identical with the Standard Valve Assembly (CONN-B950-B) except for the actuating shaft.

Connection:

For Selective and Delayed Lift connection is made with CONN-C920-A and CONN-C921-A Right and Left Hand Tube Kits. For Delayed Lift, Forward Series Tube Kit CONN-C949-A is required.

## REMOTE CYLINDER OPERATION USING REMOTE CONTROL VALVE

This method provides for use of a single acting or double acting remote cylinder. Three-point linkage can be used at any time.

### REMOTE CONTROL VALVE #231218 AND MANIFOLD #231210 - ORDERED SEPARATELY

#### Tractors Application:

600 - 700 - 800 - 900 - 601 -  
701 - 801 - 901 - 1801 - 2000 -  
4000 - 4040 - Dexta

For NAA use Manifold #231216 - ordered separately.

Single acting cylinders can be used when the valve is equipped with Tube #231225, Elbow #231226 and Connector #231227 - ordered separately.

#### Characteristics:

Control lever is located in front of operator for either right or left hand operation.

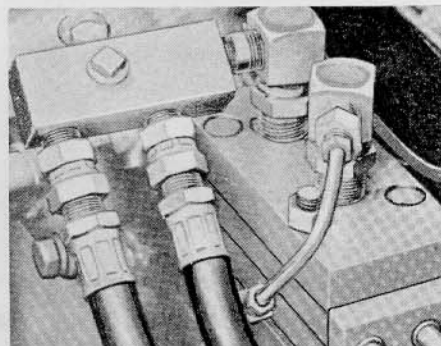
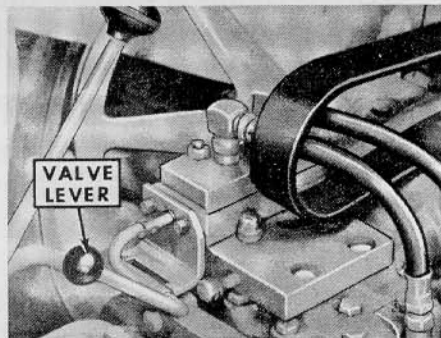
Control lever must be manually held while cylinder is being actuated. Valve returns to neutral when lever is released. Provides good feathering for both partial or full cylinder strokes.

Speed of action at cylinder is adjusted by needle control.

A third port located on Manifold #231210 (see arrow, top picture) permits connecting a single acting cylinder controlled by the touch control lever.

#### Connection to Hose:

Valve is supplied with two swivel elbow fittings having 3/8" - 18 female tapered pipe threads for hose connections.

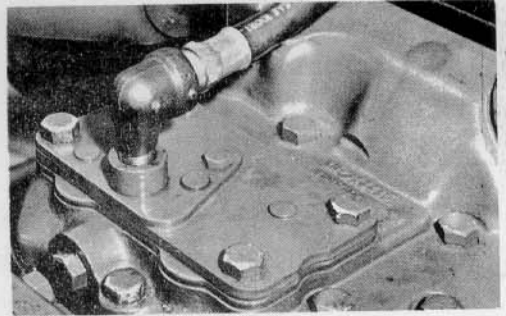




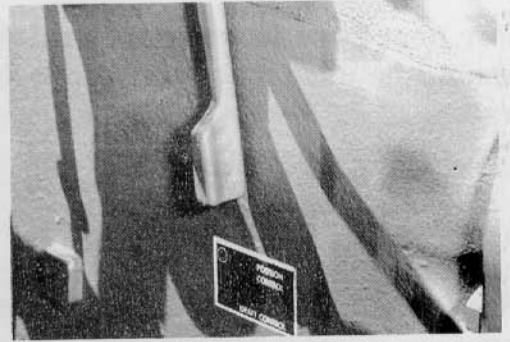
## REMOTE CYLINDER OPERATION USING LIFT ARM HOLD DOWN KIT #309600

This method provides for use of a single acting cylinder at low cost when three-point linkage is not used. One exception is the Series 101 semi-mounted plow.

Hose from remote cylinder is connected directly into manifold at right front corner of hydraulic lift cover. Port has 1/2" pipe threads.

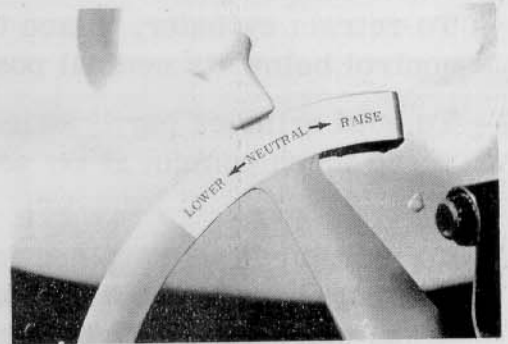


For best results constant draft control should be used when using the hold down kit.

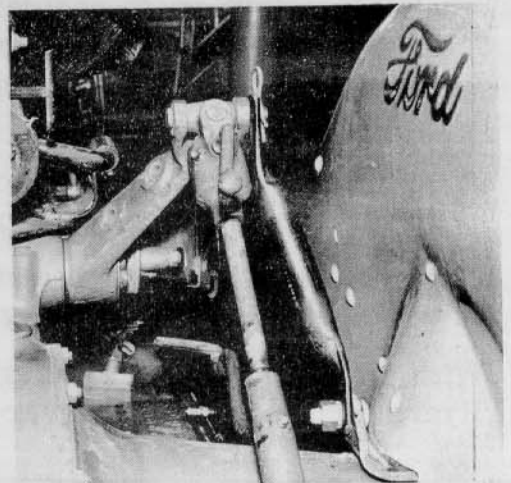


Regular touch control lever is used to operate remote cylinder.

- To retract cylinder, place touch control below its neutral position.
- To hold cylinder partly extended, place touch control at its neutral position.
- To extend cylinder, place touch control above its neutral position. When cylinder is fully extended, always return touch control to its neutral position to avoid "popping" of the tractor hydraulic system relief valve.
- As a reference, set the stop for the lower edge of the neutral position as pictured.



Use Hydraulic Lift Arm Hold Down Kit, Part No. 309600, to prevent lift arms raising to the top of their travel and making hydraulic system inactive.



## REMOTE CYLINDER OPERATION USING SELEC-TROL VALVE

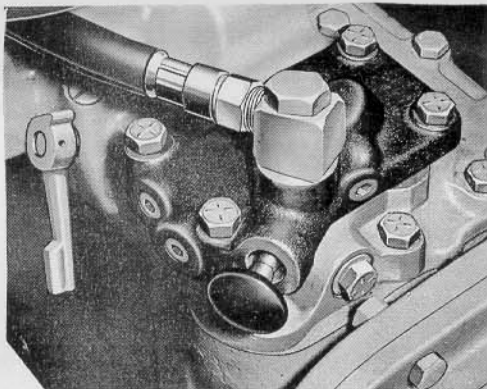
This method provides for quick and convenient use of single acting cylinder, or use of three-point linkage.

Selec-Trol valve replaces manifold at right front corner of hydraulic lift cover. With plunger of Selec-Trol valve pulled out, the three-point linkage is inactive.

### Connection to Hose:

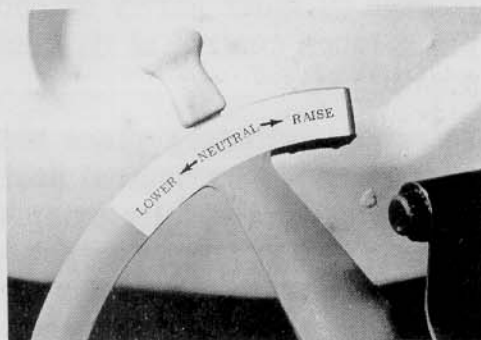
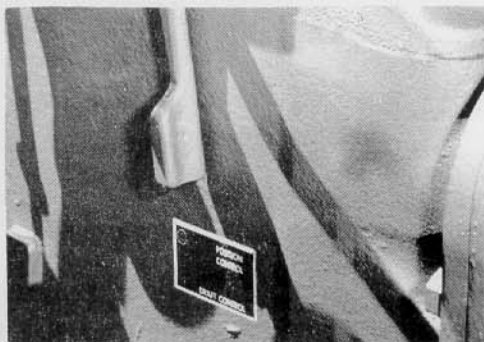
Hose from remote cylinder is connected to valve by banjo type fitting.

For best results constant draft control should be used when using the Selec-Trol valve.



Regular touch control lever is used to operate remote cylinder.

- To retract cylinder, place touch control below its neutral position.
- To hold cylinder partly extended, place touch control at its neutral position.
- To extend cylinder, place touch control above its neutral position. When cylinder is fully extended, always return touch control to its neutral position to avoid "popping" of the tractor hydraulic system relief valve.
- As a reference, set the stop for the lower edge of the neutral position as pictured.



Lift arms should not be at extreme top of their travel when the Selec-Trol valve is pulled out, or hydraulic system will be inactive.

With plunger of Selec-Trol valve pushed in, remote cylinder is inactive. Hydraulic touch control lever operates three-point linkage in normal manner.

## SELEC-TROL VALVES

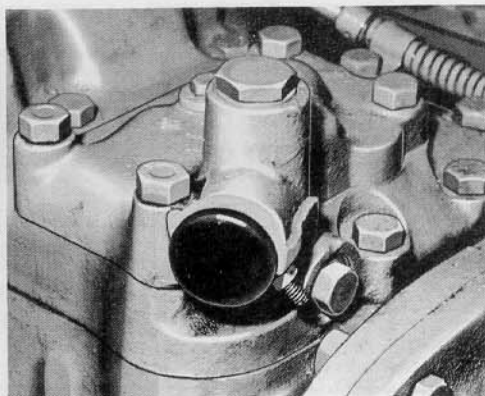
## SELEC-TROL VALVE #E52GF9

Tractors Application:

Standard on Dexta

Connection to Hose:

One port located in top of valve has 3/8" female straight thread.



## SELEC-TROL VALVE #230869

No longer available. Parts are serviced.

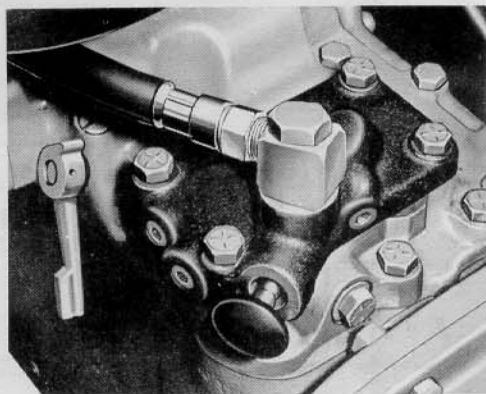
Tractors Application:

600 - 700 - 800 - 900 - 601 -  
701 - 801 - 901 - 1801 - Dexta -  
2000 - 4000 - 4040

Connection to Hose:

Valve is supplied with a banjo type fitting having 3/8" 18 male threads for hose connection.

The replacement part fitting is a swivel elbow having 3/8"-18 female tapered pipe threads for hose connection.




# HOSE KITS





CONTENTS OF KIT: Read across

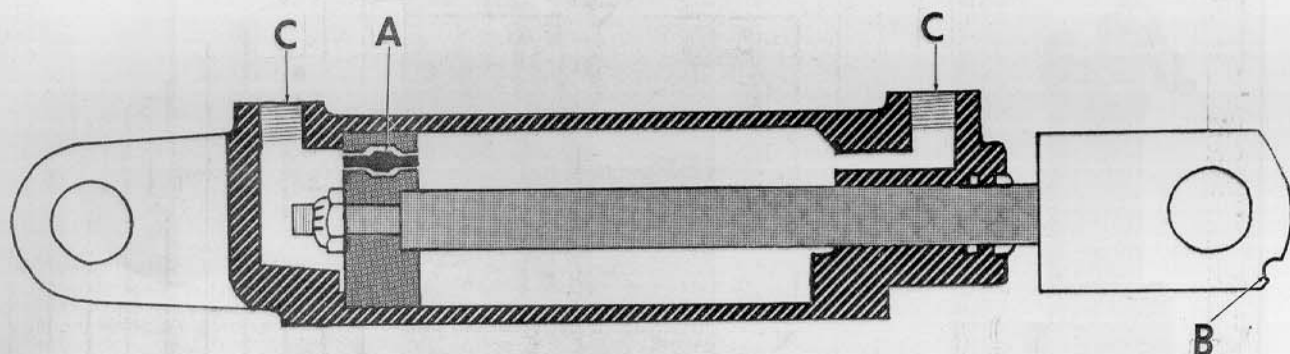
HOSE KIT NO. AND DESCRIPTION	VALVE THAT HOSE KIT IS USED WITH (VALVES ARE NOT INCLUDED IN HOSE KITS)	HOSE--VALVE TO COUPLING		
		A	HOSE END A	HOSE END B
#231450 Double Action	#311877 & CONN-B950-B Valves Hose Kit includes (2) Bolts #311113 for attaching banjo hose ends to Valve	(1) 28 1/4" #231446 (1) 32 1/2" #231447	.625 Banjo	1/2" Male
#311683 Double Action (N. A. Use 231450)	#311877 & CONN-B950-B Valves Hose Kit includes (2) Bolts #311113 for attaching banjo hose ends to Valve	(1) 28 3/8" #311120 (1) 32 5/8" #311121	.625 Banjo	3/8" Male
#309574 Double Action	#311877 & CONN-B950-B Valves Hose Kit includes (2) Bolts #311113 for attaching banjo hose ends to Valve	(1) 28 3/8" #311120 (1) 32 5/8" #311121	.625 Banjo	3/8" Male
#311684 Single Action	#311877 & CONN-B950-B Valves Hose Kit includes (1) Bolt #311113 for attaching banjo hose end to Valve	(1) 32 1/2" #311121	.625 Banjo	3/8" Male
#231174 Double Action (N. S. Use 231450)	#311877 & CONN-B950-B Valves Requires (2) Adapter Kit #311891 for attaching hoses to Valve #231218 Valve	(1) 29" #231170 (1) 31" #231171	3/8" Male	1/2" Male
#231229 Single Action (No Longer Available Use 311684)	#311877 & CONN-B950-B Valves Requires (1) Adapter Kit #311891 for attaching hose to Valve Hose Kit includes parts needed	(1) 29" #231170	3/8" Male	1/2" Male
#149027 Single Action	#311877 & CONN-B950-B Valves Requires (1) Adapter Kit #311891 for attaching hose to Valve	(1) 16 3/4" #192114	3/8" Male	3/8" Male
#230955 Single Action	Hose Kit is for tapping directly into FMD & FPM hydraulic system. Kit includes (1) 90° Swivel Fitting #359498-S8B and (1) #250232 Adapter 1/2"-14	(1) 25" #250233	1/2" Male	1/2" Male

NOTE: All Fittings and Hose Ends are American National Taper Pipe Threads, (N



Page for Components supplied in each Kit -- Starting at Valve End, Figure A: 

FITTING 	COUPLING 			FITTING 	HOSE--COUPLING TO CYLINDER 		
	C TYPE	D C & D	MOUNTING BRACKET		E HOSE END E	F HOSE END F	
	(2) Break-Away	1/2" Female	Included in Kit				
(2) Bushing #358917-S 3/8" Female 1/2" Male	(2) Break-Away	1/2" Female	Included in Kit				
(2) Bushing #358917-S 3/8" Female 1/2" Male	(2) Break-Away	1/2" Female	---				
(1) Bushing #358917-S 3/8" Female 1/2" Male	(1) Break-Away	1/2" Female	Included in Kit				
---	(2) Break-Away	1/2" Female	Included in Kit	---	(2) 101" #230522	1/2" Male	1/2" Male
---	(1) Break-Away	1/2" Female	Included in Kit	---	(1) 101" #230522	1/2" Male	1/2" Male
---	(1) Quick Disconnect	3/8" Female	---	(1) Bushing #149025 3/8" Male 1/4" Female	(1) 101" #149028	1/4" Male	1/4" Male Kit includes (1) Street Ell #304484 1/4" Female 1/4" Male
---	(1) Break-Away	1/2" Female	Included in Kit	---	(1) 101" #230522	1/2" Male	1/2" Male Kit includes Brkt to carry Cyl. #230560 when Cyl. is not in use.



### 106000 CYLINDER

There are two different Cylinder Assemblies used in the production of Cultivator Delayed Lift Kits, Selective & Delayed Lift Kits and Hydraulic Lift Kits.

Delayed Lift Kits 13-140, 13-222 and 13-223 are shipped with Cylinder Assemblies without a Poppet Valve in the Piston.

Selective & Delayed Lift Kits and Hydraulic Lift Kits 13-139, 13-221 and 13-175 are shipped with Cylinder Assembly 106000 which includes a Poppet Valve in the Piston.

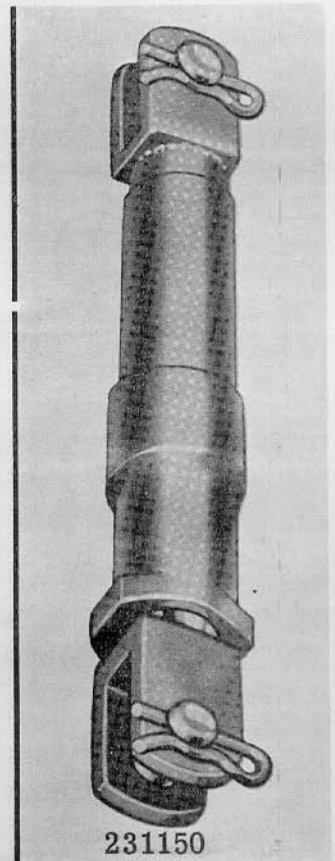
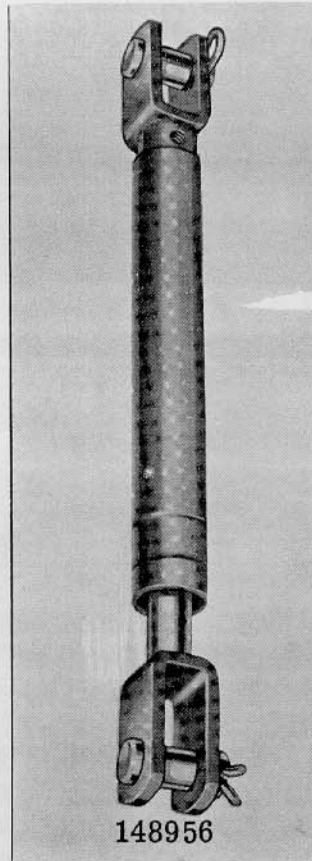
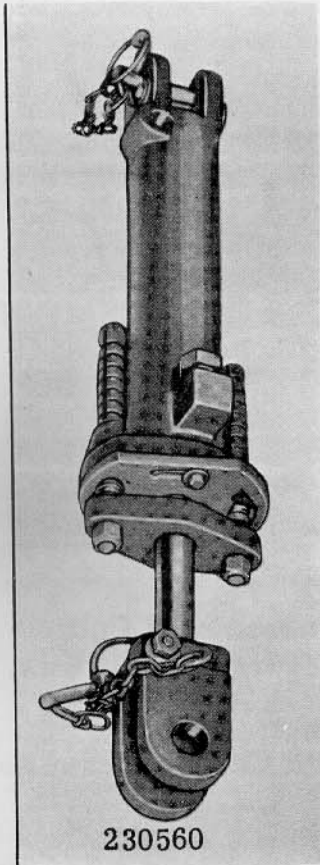
In order to simplify the servicing of these Kits we are only offering the 106000 Cylinder which contain the internal poppet (A) Valve and can be placed in an operative or inoperative position.

Identification mark (notch) on clevis (B) is positioned to same side as ports (C) to make poppet valve operative. In assembly, poppet valve is always  $180^{\circ}$  opposite notch. By rotating Rod and Clevis Assembly  $180^{\circ}$  from ports, the valve is inoperative as in illustration above.

The correct operating position of the poppet valve in all applications may be found by checking the illustrations on pages 18 & 19 to determine whether the cylinder notch is down (inoperative) or up (operative).

CYLINDERS

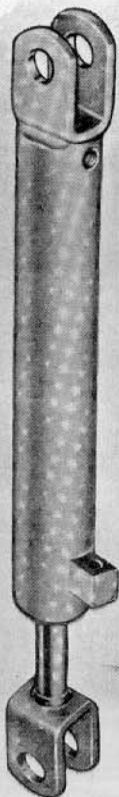
Single or Double Acting Cylinders are available for use with Ford Remote Control Valves and Hose Kits. Near uniform cylinder length and uniform pin diameter permits some interchangeability of cylinders to vary thrust load and speed of operation.



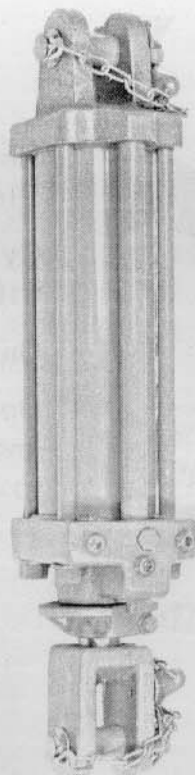
	230560	148956	231150
Single or Double Acting	S. A. & D. A.	S. A.	S. A.
Thrust Capacity	7500#	2500#	6000#
Port Size	1/2" Female Pipe Thread	1/4" Female Pipe Thread	1/2" Female Pipe Thread
Bore	2-1/4"	1-1/8"	2"
Stroke	8"	8"	8"
Length between attach. Pin centers - Cylinder open	28-3/8"	28-3/8"	28-3/8"
Length between attach. pin centers - cylinder closed	20-3/8"	20-1/4"	20-1/4"
Yoke Size (width & depth)	1" x 2-7/8"	1" x 3-1/4"	1" x 3-1/4"
Pin Size (diam. & length to hole center)	1" x 2-1/2"	1" x 2"	1" x 2"

NOTE: Operating pressures should never exceed 2000 p. s. i. in any of these cylinders.

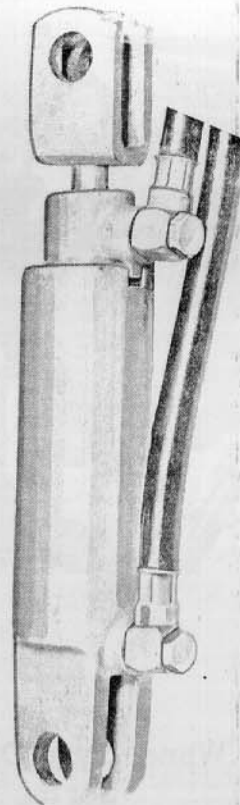
## CYLINDERS



194669



CBPN-848-A



106000

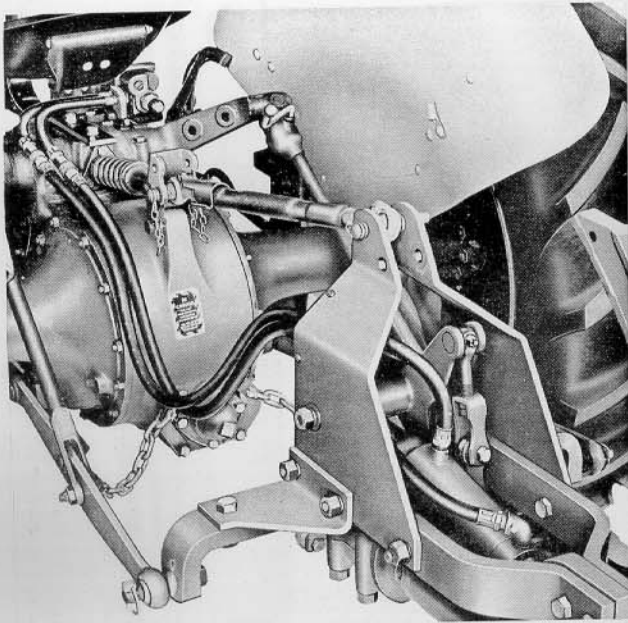
Single or Double Acting	194669 D. A.	CBPN-848-A D. A.	106000† D. A.
Thrust Capacity	6000#	15, 000#	7500#
Port Size	3/8" Female Pipe Thread	3/4" Female Pipe Thread*	9/16 Female Pipe Thread
Bore	2"	3"	2-1/4"
Stroke	11"	8"	5"
Length between attach. pin centers - cylinder open	31-1/4"	28-1/4"	19-1/4"
Length between attach. pin centers - cylinder closed	20-1/4"	20-1/8"	14-1/8"
Yoke Size (width & depth)	1"x 2-3/4"	1 3/16 x 2-7/8"	25/32 x 2-3/4"
Pin Size (diam. & length to hole center)	1" x 2"	1 x 2-11/16"	1" x 2"

\* CBPN-848-A Cylinder Kit has 3/4" ports, however a Union Adapter #375846-S8 is included in the Kit to reduce the port from 3/4" to 1/2" so the 101" or 118" Hose Assy. can be installed.

† Refer to the next page for further information regarding the use of 106000 Cylinder.



## TYPICAL INSTALLATIONS



**2-Way 2-Furrow Plow  
Series 115**

---

Remote Control used to Roll-over Plow

Cylinder and Hose Kit are provided with Plow

Only Valve required

Operates on Dexta, Fordson Major and all Ford Tractors from 1953 to date

**Wheel Type Disc Harrow  
Series 204**

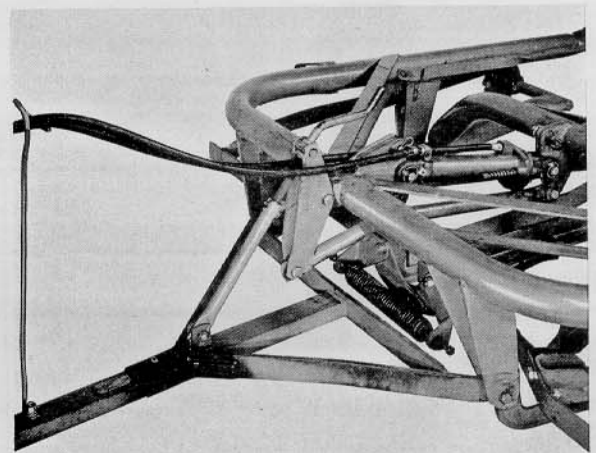
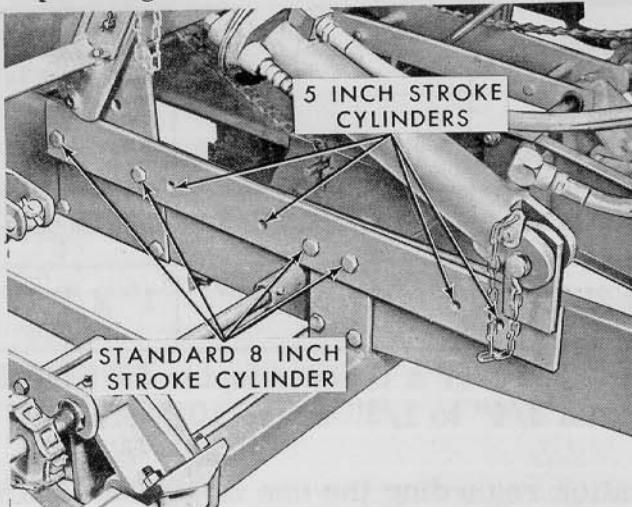
---

Remote Control used to raise and lower gangs

No Mounting Kit required

Either Single or Double Acting Cylinder can be used. Cylinders 6000# or over are recommended

Also requires proper Hose Kit and Valve depending on Tractor and Cylinder usage.



**Four Row Pull Type Planter  
Series 311**

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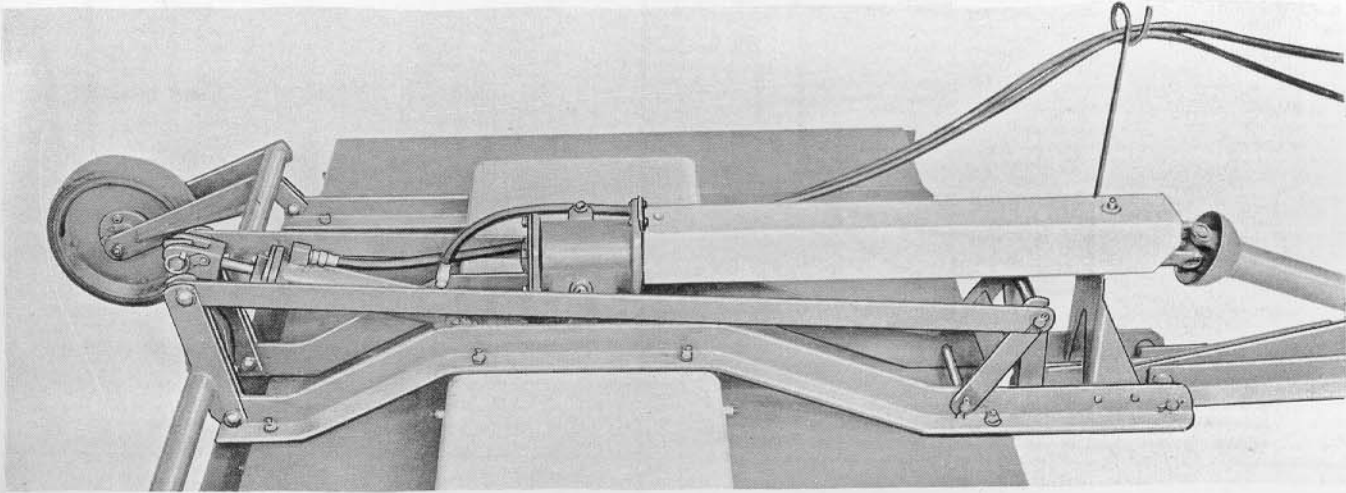
Cylinder 230560 or 106000 required to raise planter

Cylinder Anchor which is part of basic planter may be adjusted for 5" or 8" stroke Cylinders

A Double Acting Cylinder is recommended

Operates on all Dexta, Fordson Major and Ford Tractor to date

## TYPICAL INSTALLATIONS



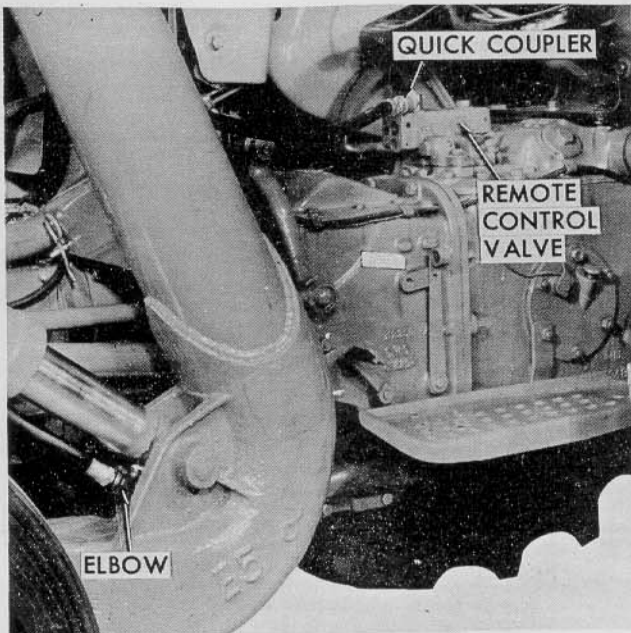
**100" Rotary Cutter**  
**Series 902**

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Remote Control used to raise and lower cutting height.  
Single or Double Acting Cylinders may be used.

Hose Support Kit 231757 also recommended in addition to Hoses, Hose Kit, Valve and Cylinder.

Operates with all Dexta, Fordson Major and Ford Tractors.



**Farm Loader**  
**Series 711**

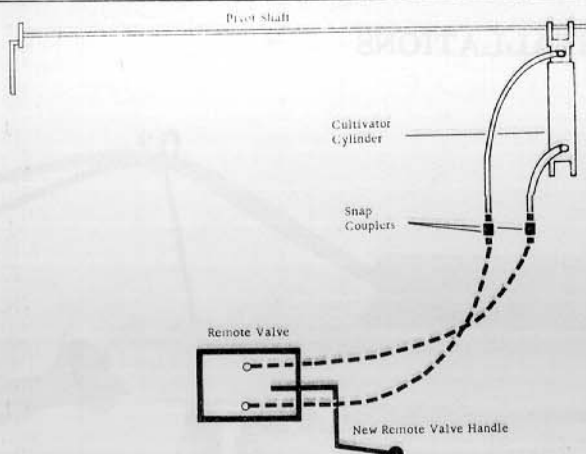
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Remote Control Valve permits independent use of Loader and rear hitch.

Operates with 311877 Valve or 309600 Holddown Kit only. No additional Cylinders, Hose Kits or Mounting Parts necessary.

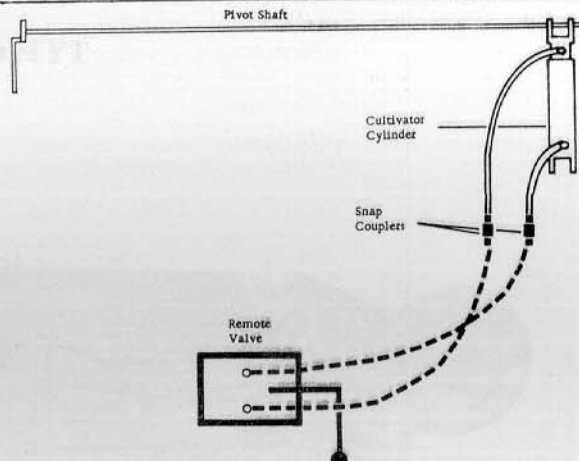
Adaptable to any 600 through 901 Tractor with a Hydraulic System.

DELAYED AND SELECTIVE & DELAYED LIFT CULTIVATOR INSTALLATIONS



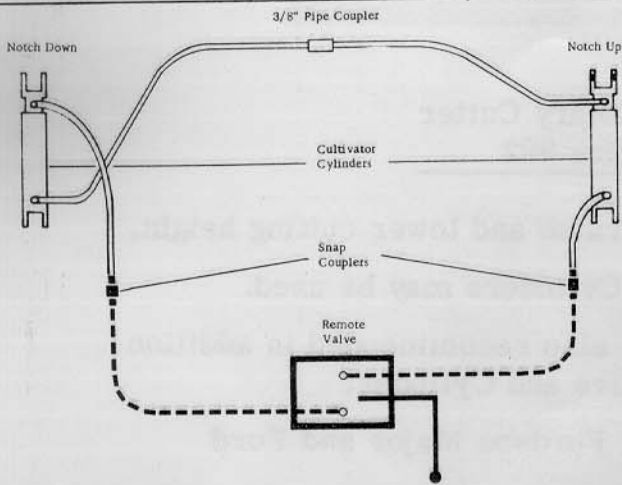
Delayed Lift 411 on 501

- 13-223 Delayed Lift
- - - 309574 Hose Kit
- 311877 Remote Control Valve
- 312848 Remote Control Valve Handle (replaces original)



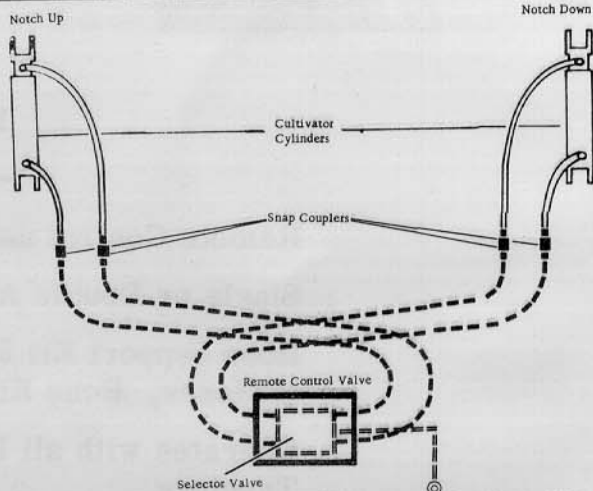
Delayed Lift 402, 403, 404 and 405 on 701 or 901

- 13-222 Delayed Lift
- - - 309574 Hose Kit
- 311877 Remote Valve



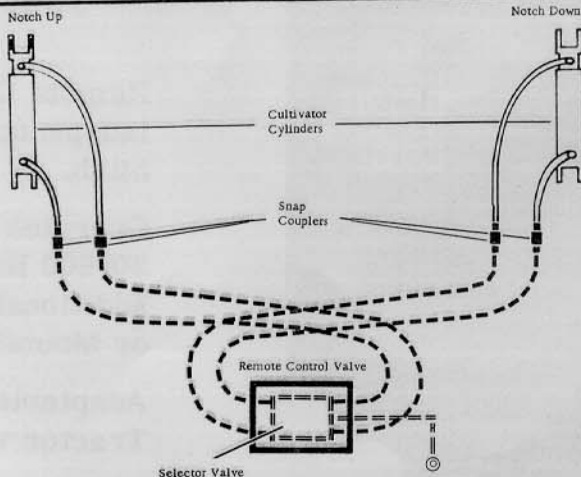
Delayed Lift 412 on 901

- 13-175 Delayed and Selective Lift
- - - 309574 Hose Kit
- 311877 Remote Control Valve



Selective and Delayed Lift 402, 403, 404 and 405 on 701 and 901

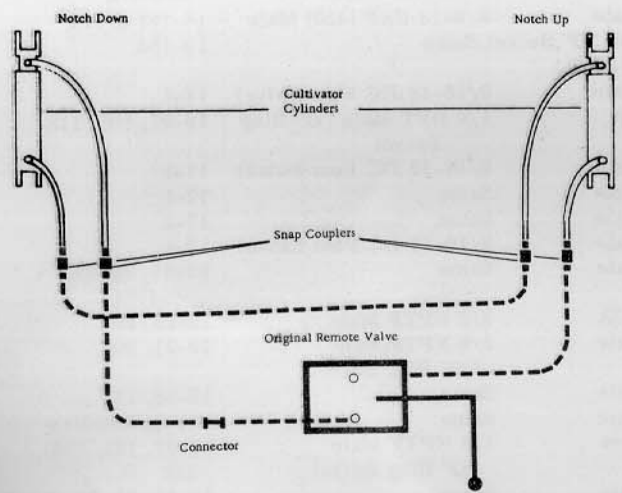
- 13-221 Selective and Delayed Lift
- - - 309574 Hose Kits (2 required)
- 311877 Remote Control Valve
- - - 231384 Selector Valve



Delayed and Selective 412 on 901

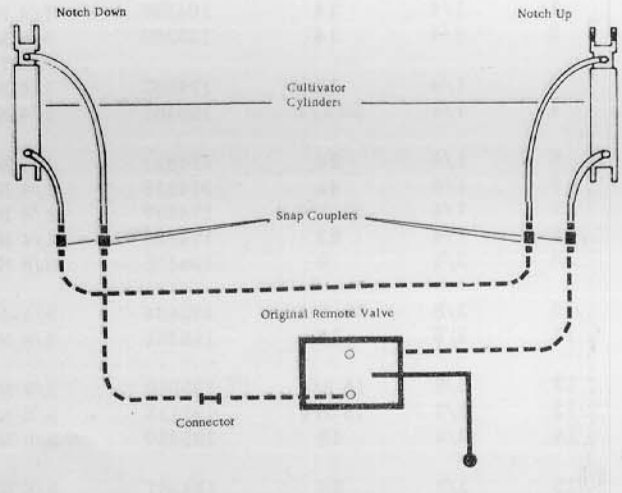
- 13-175 Selective and Delayed Lift
- - - 309574 Hose Kit (2 required)
- 311877 Remote Control Valve
- - - 231384 Selector Valve

6000 TRACTOR DELAYED AND SELECTIVE & DELAYED LIFT CULTIVATOR INSTALLATIONS



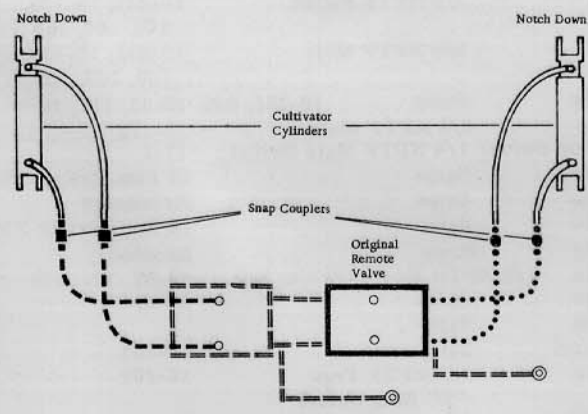
Delayed Lift 402, 403, 404 and 405 on 6000

- 13-221 Selective and Delayed Lift
- - - CONN-C-949-A Forward Tube Kit, Series Flow



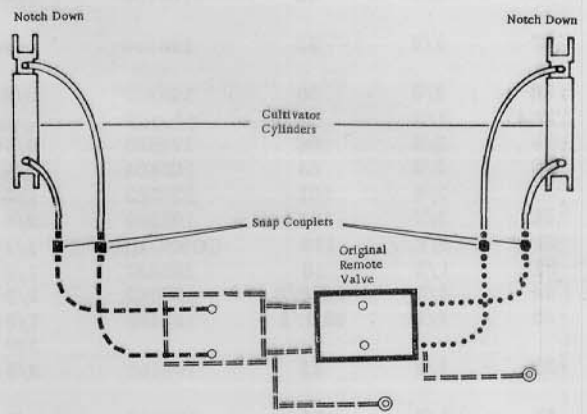
Delayed Lift 412 on 6000

- 13-175 Selective and Delayed Lift
- - - CONN-C-949A Forward Tube Kit, Series Flow



Selective and Delayed Lift 402, 403, 404 and 405 on 6000

- 13-221 Selective and Delayed Lift
- - - CONN-C-921A LH Tube Kit
- ..... CONN-C-920A RH Tube Kit
- ==== CONN-C-919A Second Remote Valve, Connecting Plumbing and two Valve Handles



Selective and Delayed Lift 412 on 6000

- 13-175 Selective and Delayed Lift
- - - CONN-C921-A L. H. Tube Kit
- ..... CONN-C920-A R. H. Tube Kit
- ==== CONN-C919-A Second Remote Valve, Connecting Plumbing & two Remote Valve Handles



## HOSE SPECIFICATION: SINGLE WIRE BRAID

NOTE: Fittings Column, Second End Same indicates the same as First End.

ITEM	HOSE I. D.	INCHES LENGTH	PART NO.	FITTINGS		USAGE
				FIRST END	SECOND END	
1	1/4	14	104299	1/4 NPTF Male	5/8-18 UNF (450) Male	14-177 & 178
2	1/4	14	193259	5/8 Male, Tub "O" Swivel Nut 7/8-14 UNF-2A	Same	19-154
3	1/4	15	174832	1/4 NPTF Male	9/16-18 JIC Fem Swivel	17-1
4	1/4	20 1/2	195461	1/4 NPT Fem	1/4 NPT Male "O" Ring Swivel	19-97, 105, 118
5	1/4	26	174831	1/4 NPTF Male	9/16-18 JIC Fem Swivel	17-1
6	1/4	41	174838	1/4 NPTF Male	Same	17-1
7	1/4	51 3/4	174837	1/4 NPTF Male	Same	17-1
8	1/4	63	174830	1/4 NPTF Male	9/16-18 JIC Fem Swivel	17-1
9	3/8	8	194455	3/8 NPTF Male	Same	19-65, 66, 89, 194774
10	3/8	8	192484	3/4-16 UNF-2A	3/8 NPTF Male	19-29, 90
11	3/8	12	195365	3/8 NPTF Male	3/8 NPTF Fem "O" Ring Swivel	19-91, 200
12	3/8	15 3/4	195040	3/8 NPTF Male	Same	19-88, 101
13	3/8	16 3/4	192114	3/8 NPTF Male	Same	Plows, Loaders
14	3/8	18	195460	3/8 NPTF Fem	3/8 NPTF Male "O" Ring Swivel	19-97, 101, 105 118
15	3/8	22	194387	3/8 NPTF Male	Same	19-42, 61, 70, 71
16	3/8	23 1/2	195455	3/8 NPTF Male	3/8 NPTF Fem "O" Ring Swivel	19-101
17	3/8	25	250233	1/2 NPTF Male	Same	Accessory
18	3/8	25	195464	3/8 NPTF Fem	3/8 NPTF Male "O" Ring Swivel	19-97, 101, 105
19	3/8	28 3/8	311120	.625 ID Banjo	3/8 NPTF Male	Accessory
19A	3/8	28 3/8	231446	.625 ID Banjo	1/2 NPTF Male	Accessory
20	3/8	29	231170	3/8 NPTF Male	1/2 NPTF Male	Accessory
21	3/8	31	231171	3/8 NPTF Male	1/2 NPTF Male	Accessory
22	3/8	32	194480	3/8 NPTF Male	Same	19-42, 61, 70, 71
23	3/8	32 5/8	311121	.625 ID Banjo	3/8 NPTF Male	Accessory
23A	3/8	32 5/8	231447	.625 ID Banjo	1/2 NPTF Male	Accessory
24	3/8	34 1/2	192010	1/2 NPTF Male	Same	19-7
25	3/8	40	195039	3/8 NPTF Male	Same	19-88
26	3/8	45	106139	.625 ID Banjo	3/8 NPTF Male	10-381, 13-139, 140, 163, 169
27	3/8	53	106140	.625 ID Banjo	3/8 NPTF Male	10-381, 13-139, 140, 163, 169
28	3/8	56	195200	3/8 NPTF Male	Same	10-251, 445, 19-93, 117, 18
28A	3/8	60	130358	.625 Banjo	3/8 NPTF Male	13-175
29	3/8	66	174835	9/16-18 JIC Fem Swivel	1/4 NPTF Male Swivel	17-1
30	3/8	84	102604	3/8 NPTF Male	Same	(3 Btm. Frame Plow)
31	3/8	101	230522	1/2 NPTF Male	Same	Accessory
32	3/8	104	102569	3/8 NPTF Male	Same	(4 Btm. Frame Plow)
32A	3/8	118	CONN-B968-C	1/2 NPTF Male	Same	Accessory
33	1/2	16	195457	1/2 NPTF Male	1/2 NPTF Fem. "O" ring Swl.	19-97, 101, 105
34	1/2	16-5/8	190943	1/2 NPTF Male	Same	19-8, 8A
35	1/2	22 1/2	193496	7/8-14 UNF-2B 37° Flared Swivel	Same	19-181
36	1/2	23	195456	3/8 NPTF Male	1/2 NPTF Fem "O" Ring Swivel	19-101
37	1/2	23	108150	7/8-14 UNF-2A "O" Ring Boss	7/8-14 UNF-2B 37° Flared Swivel	19-131
38	1/2	25	196083	1/2 NPTF Fem	1/2 NPTF Male "O" Ring Swivel	19-97, 105, 22-61
39	1/2	55	174833	1/2 NPTF Male Swivel	7/8-14 JIC Fem Swivel	17-1

HOSE SPECIFICATION: DOUBLE WIRE BRAID

ITEM	HOSE I. D.	INCHES LENGTH	PART NO.	FITTINGS		USAGE
				FIRST END	SECOND END	
40	1/2	21	193175	1/2 NPTF Male .88 Hex Nut	Same	19-159, 160
41	1/2	22 1/2	193247	7/8-14 UNF-2A	Same	19-153, 154, 155
42	1/2	24	193251	7/8-14 UNF-2A	5/8 Male Tube "O" Ring Swivel Nut, 90° 7/8-14 UNF-2A	19-153, 154, 155
43	1/2	30	114049	7/8-14 UNF-2B 37° Flared Swivel	7/8-14 UNF-2A 90° Swivel Flare, "O" Ring Type	19-131, 181
44	1/2	39	193246	5/8 Male Tube "O" Ring Swivel Nut 7/8-14 UNF-2A	Same	19-153, 154, 155
45	3/4	18	193174	3/4 NPTF Male	Same	19-159, 160
46	3/4	24 1/2	193182	3/4 NPTF Male	1-3/16-12 UNF-2B 90° Elbow 37° Flared Swivel	19-159, 160
47	3/4	36	191780	1-3/16-12 UNF-2A 37° Flare	Same	19-153, 154, 155
48	3/4	41	193493	7/8-14 UNF-2A "O" Ring Boss	1-3/16-12 UNF-2B 37° Flared Swivel	19-181
49	3/4	45 3/8	193494	7/8-14 UNF-2A "O" Ring Boss	1-3/16-12 UNF-2B 37° Flared Swivel	19-181

HOSE SPECIFICATION: DOUBLE FABRIC BRAID

49A	1/4	35	100809	3/8 NPTF Male	1/4 NPTF Male O ring. Swvl.	14-211
50	1/4	101	149028	1/4 NPTF Male	Same	Accessory
51	3/8	66	174836	9/16-18 JIC Fem Swivel	Same	17-1
52	1	46	193316	1-3/16-12 UNF-2A Male 37° Flared Swivel	Same	19-153, 154, 155

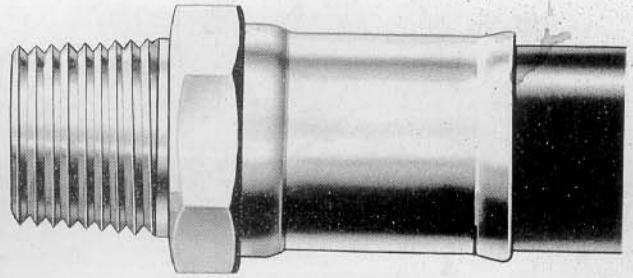
HYDRAULIC HOSE ASSEMBLIES  
NUMERICAL INDEX

PART NO.	ITEM	PART NO.	ITEM	PART NO.	ITEM
		191780	47	194480	22
CONN-B968-C	32A				
100809	49A	192010	24	195039	25
102569	32	192114	13	195040	12
104299	1				
106139	26	192484	10	195200	28
106140	27	193174	45	195365	11
108150	37				
114049	43	193175	40	195455	16
130358	28A	193182	46	195456	36
149028	50	193246	44	195457	33
174830	8	193247	41	195460	14
174831	5	193251	42	195461	4
174832	3	193259	2	195464	18
174833	39	193316	52	196083	38
174835	29	193493	48	230522	31
174836	51	193494	49	231170	20
174837	7	193496	35	231171	21
174838	6	194387	15	231446	19A
190943	34	194455	9	231447	23A
				250333	17
				311120	19
				311121	23

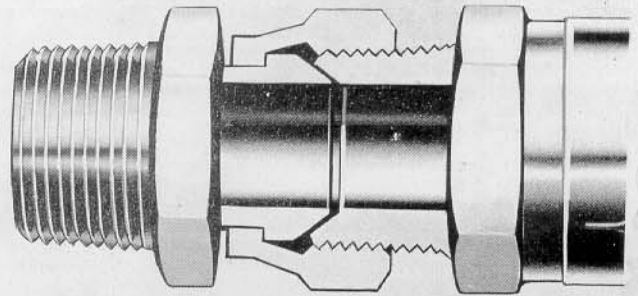
## STANDARD DRYSEAL PIPE THREAD FITTINGS

### Description

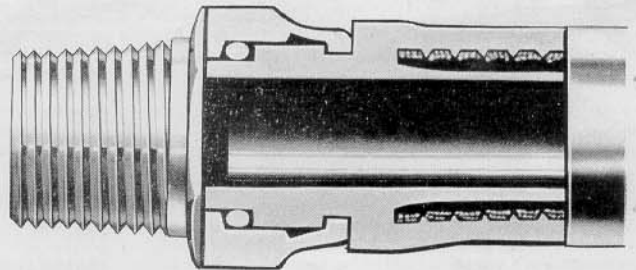
**STANDARD TAPERED PIPE THREAD** -- Seals on thread except when used with the flared female swivel.



**FEMALE SWIVEL ADAPTER, STANDARD PIPE** -- Male end seals on tapered thread, female swivel seals on 30° tapered flare.



**MALE SWIVEL STANDARD PIPE FITTING** -- Seals on tapered thread with "O" ring seal in swivel which allows hose to self align.



**BANJO TYPE FITTING** -- Has straight male thread and "O" Ring seal with oil port through bolt. Opposite end may be swedged on hose, or have female pipe thread.

