

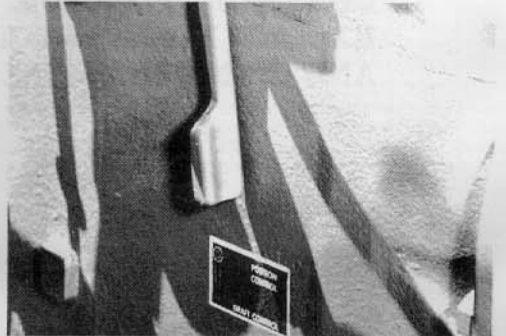
# REMOTE CYLINDER OPERATION USING LIFT ARM HOLD DOWN KIT #309600

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



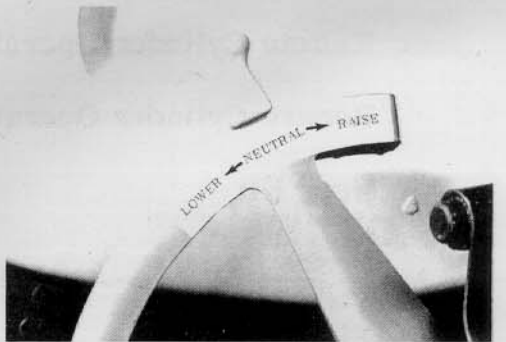
Regular touch control lever is used to operate remote cylinder.

-To retract cylinder, place touch control below its neutral position.

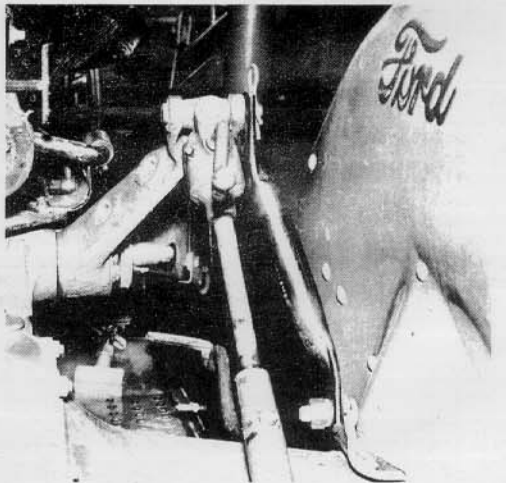
-To hold cylinder partly extended, place touch control at its neutral position.

-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.

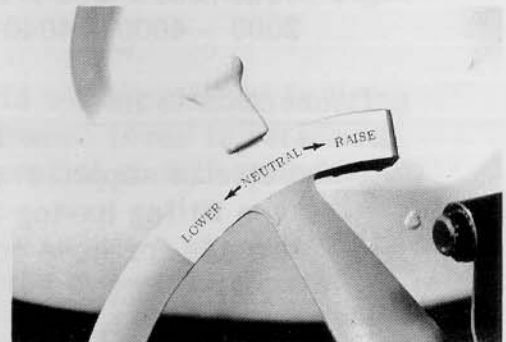
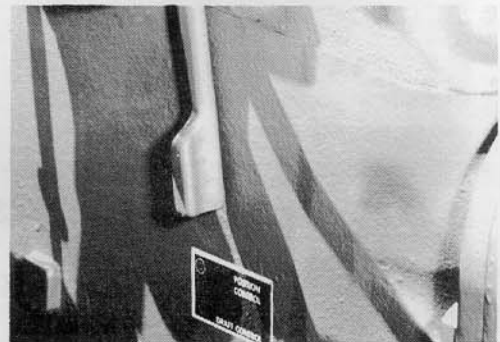
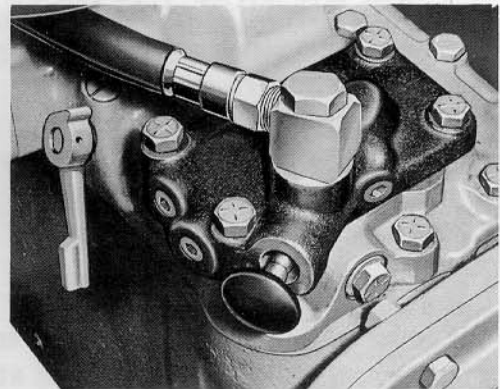
For best results constant draft control should be used when using the Selec-Trol valve.

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

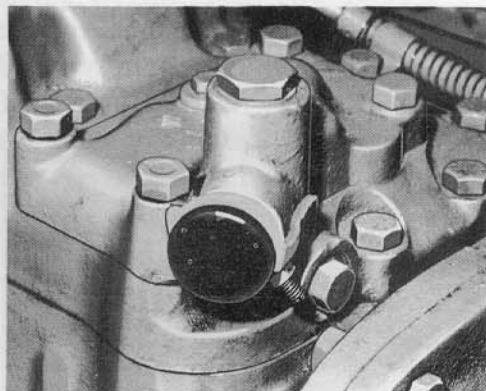
### SELEC-TROL VALVE #E52GF9

#### 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

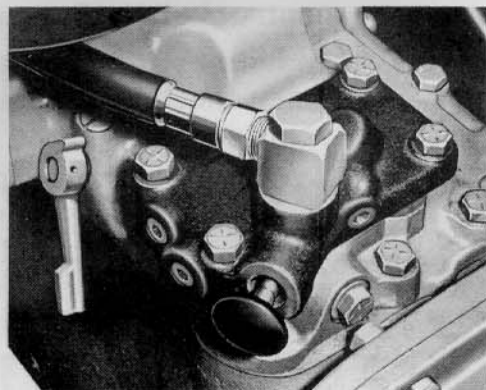
No longer available. Parts are serviced.

#### 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.

# 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.

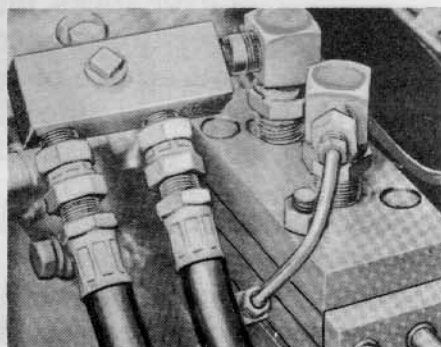
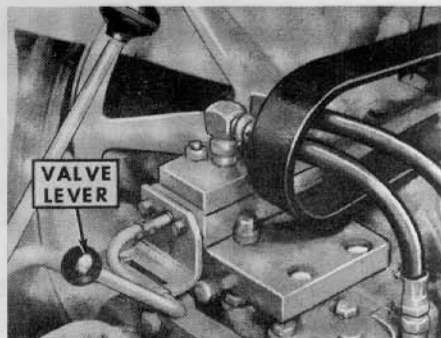
REMOTE CONTROL VALVE #231218 AND MANIFOLD #231210 -  
ORDERED SEPARATELY

## 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.

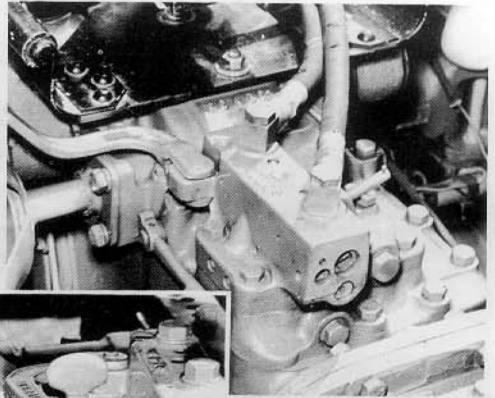


## REMOTE CONTROL VALVE #311877

### Tractors Application:

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

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



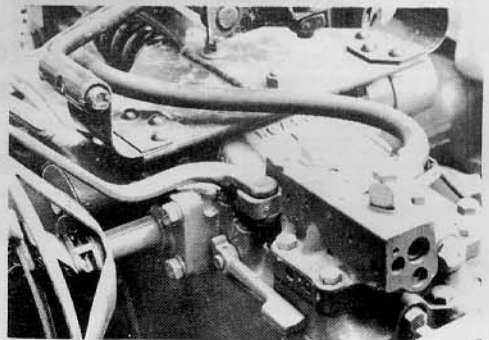
### Characteristics:

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.

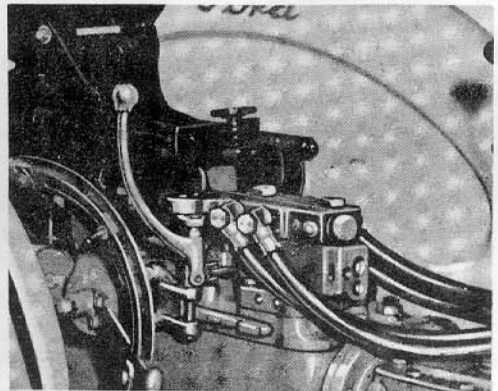


### Connection to Hose:

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 #87034-S91 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 #311871 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.

Lever is located adjacent to the control lever of the #311877 Valve and 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 87034-S91 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.

# 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	
		HOSE END A	HOSE END B
#311683 Double Action	#311877 Valve 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 NPTF
#309574 Double Action	#311877 Valve 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 NPTF
#311684 Single Action	#311877 Valve Hose Kit includes (1) bolt #311113 for attaching banjo hose end to valve	(1) 32 1/2" #311121	.625 Banjo 3/8" Male NPTF
#231174 Double Action (Not Available)	#311877 Valve Requires (2) Adapter Kit #311891 for attaching hoses to valve.  #231218 Valve	(1) 29" #231170 (1) 31" #231171	3/8" Male NPTF 1/2" Male NPTF
#231229 Single Action (Not Available)	#311877 Valve Requires (1) Adapter Kit #311891 for attaching hose to valve. #231218 Valve Hose Kit includes parts needed to convert valve for single action.	(1) 29" #231170	3/8" Male NPTF 1/2" Male NPTF
#149027 Single Action	#31177 Valve Requires (1) Adapter Kit #311891 for attaching hose to valve	(1) 16 3/4" #192114	3/8" Male NPTF 3/8" Male NPTF
#230955 Single Action	Hose Kit is for tapping directly into FMD & FPM hydraulic system. Kit includes (1) 90° Swivel Fitting #35498-S8B and (1) #250232 Adapter 1/2" - 14 NPTF	(1) 25" #250233	1/2" Male NPTF 1/2" Male NPTF

NPTF - National Pipe Thread Fitting

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



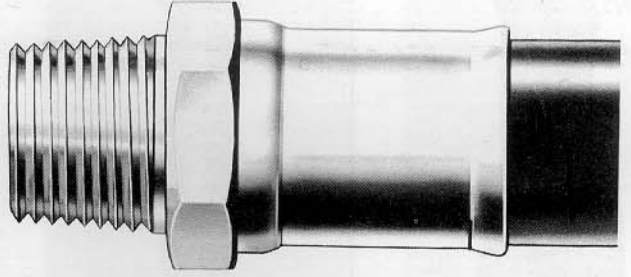
# HOSES — 3/8 ID SINGLE WIRE BRAID

Length	Part No.	Tapered Pipe				Banjo	Original Use
		3/8"-18 Male	1/2"-14 Male	3/8"-18 Female	3/4"-16 Female	"O" Ring .625" ID	
8"	192484	x			x		708 Rear Loader
12"	195365	x		x			705 Dozer
15 3/4"	195040	xx					708 Rear Loader
25"	250233		xx				Remote Control
28 3/8"	311120	x				x	Remote Control
29"	231170	x	x				Remote Control
31"	231171	x	x				Remote Control
32 5/8"	311121	x				x	Remote Control
40"	195039	xx					708 Rear Loader
45"	106139	x				x	113 Front Mtd. Middlebuster 402, 403, 404, 405, 411 Cult.
53"	106140	x				x	113 Front Mtd. Middlebuster 502, 403, 404, 405, 411 Cult.
56"	195200	xx					701, 702 Loaders
84"	102604	xx					101 Plow
101"	230522		xx				Remote Control
104"	102569	xx					101 Plow

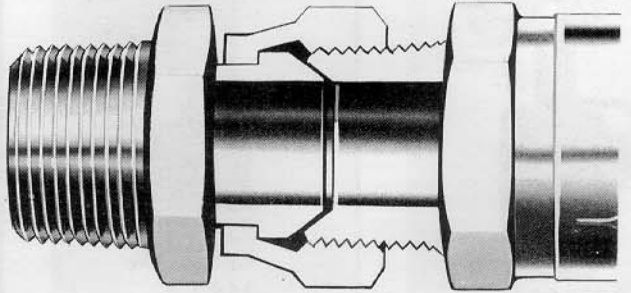
# STANDARD DRYSEAL PIPE THREAD FITTINGS

## Description

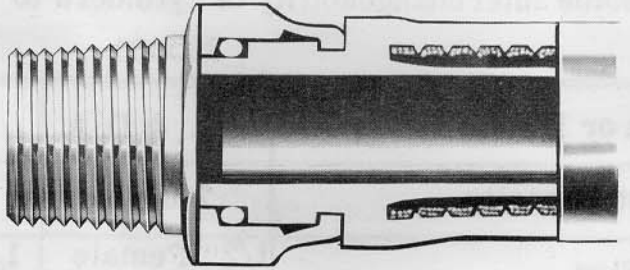
**STANDARD TAPERED PIPE THREAD--**Seals on thread except when used with the flared female swivel.



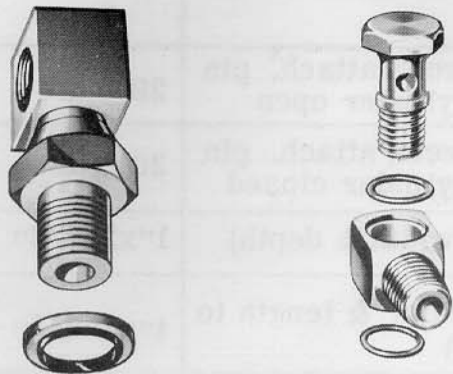
**FEMALE SWIVEL ADAPTER, STANDARD PIPE--**Male end seals on tapered thread, female swivel seals on 30° tapered flare.



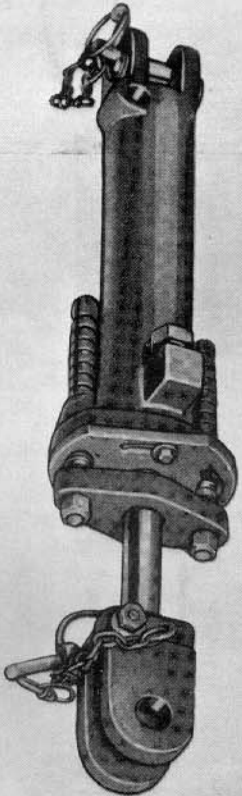
**MALE SWIVEL STANDARD PIPE FITTING--**Seals on tapered thread with "O" ring seal in swivel which allows hose to self align.



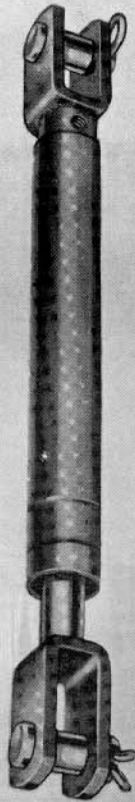
**BANJO TYPE FITTING--**Has straight male thread and "O" ring seal with oil port through bolt. Opposite end may be swedged on hose, or have female pipe thread.



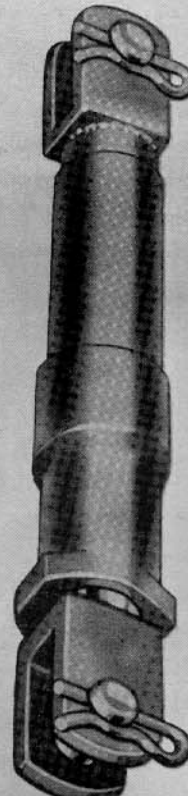
# CYLINDERS



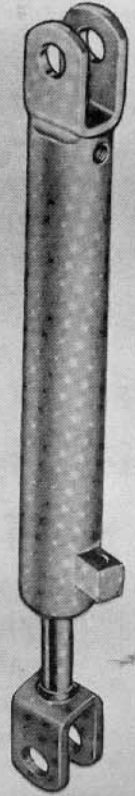
230560



148956



231150



194669

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

194669

	230560	148956	231150	194669
Single or Double Acting	S. A. & D. A.	S. A.	S. A.	D. A.
Thrust Capacity	7500#	2500#	6000#	6000#
Port Size	1/2" Female Pipe Thread	1/4" Female Pipe Thread	1/2" Female Pipe Thread	3/8" Female Pipe Thread
Bore	2-1/4"	1-1/8"	2"	2"
Stroke	8"	8"	8"	11"
Length between attach. pin centers - cylinder open	28-3/8"	28-3/8"	28-3/8"	31-1/4"
Length between attach. pin centers - cylinder closed	20-3/8"	20-1/4"	20-1/4"	20-1/4"
Yoke Size (width & depth)	1"x2-7/8"	1"x3-1/4"	1"x3-1/4"	1"x2-3/4"
Pin Size (diam. & length to hole center)	1"x2-1/2"	1" x 2"	1" x 2"	1" x 2"

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