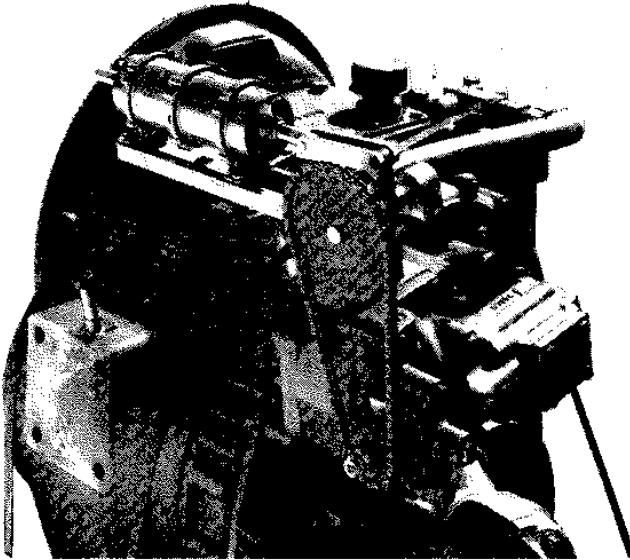


**TWIN DISC 514
OMEGA PNEUMATIC
ADAPTOR BRACKET
WITH PNEUMATIC
CONTROL CYLINDER
- KIT 4275 -**



Illustrating adaptor kit installed on 514 Omega gear.

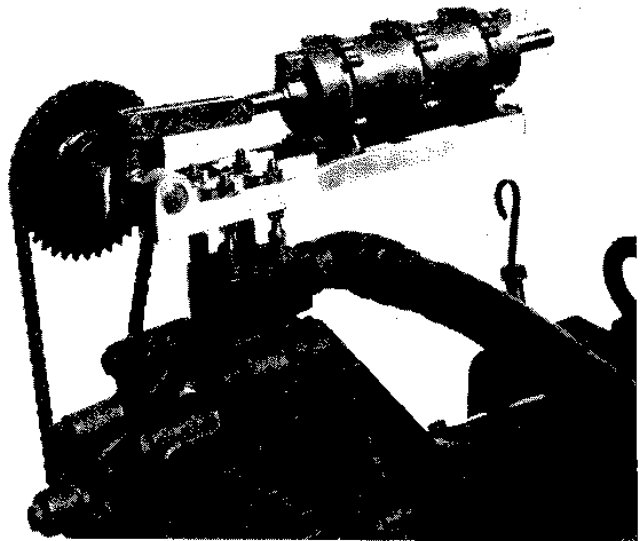
This package contains everything required to adapt pneumatic remote control to this Twin Disc gear. The four studs provided, item 11, replace the four hold down screws provided for the cast iron cap attached to the oil supply line. It is recommended that one bolt is removed at a time and replaced with the studs. This is to avoid damage to the gasket and entry of foreign matter. After all four studs are firmly in place the upper nuts and washers must be removed from the studs. The adaptor bracket can now be placed on top of the lower washers and nuts.

The existing sprocket must be removed from the Omega control shaft including the friction plate. The small brass spacer, item 10, is placed on the Omega control shaft with the Chamfer toward the gear housing. In order to install this spacer the Woodruff key must be removed and reinstalled after the spacer is in place. The sprocket, item 9, can now be pushed on the shaft. The nut, item 15, provided by Twin Disc, must be securely tightened. The chain, including the chain link provided in this package can now be installed around both

sprockets. The upper and lower four nuts on the stud are now adjusted to eliminate the slack in the chain. The chain must not be too tight as this will cause binding in the Omega control valve and will therefore result in sticking and seizing of the Omega control valve.

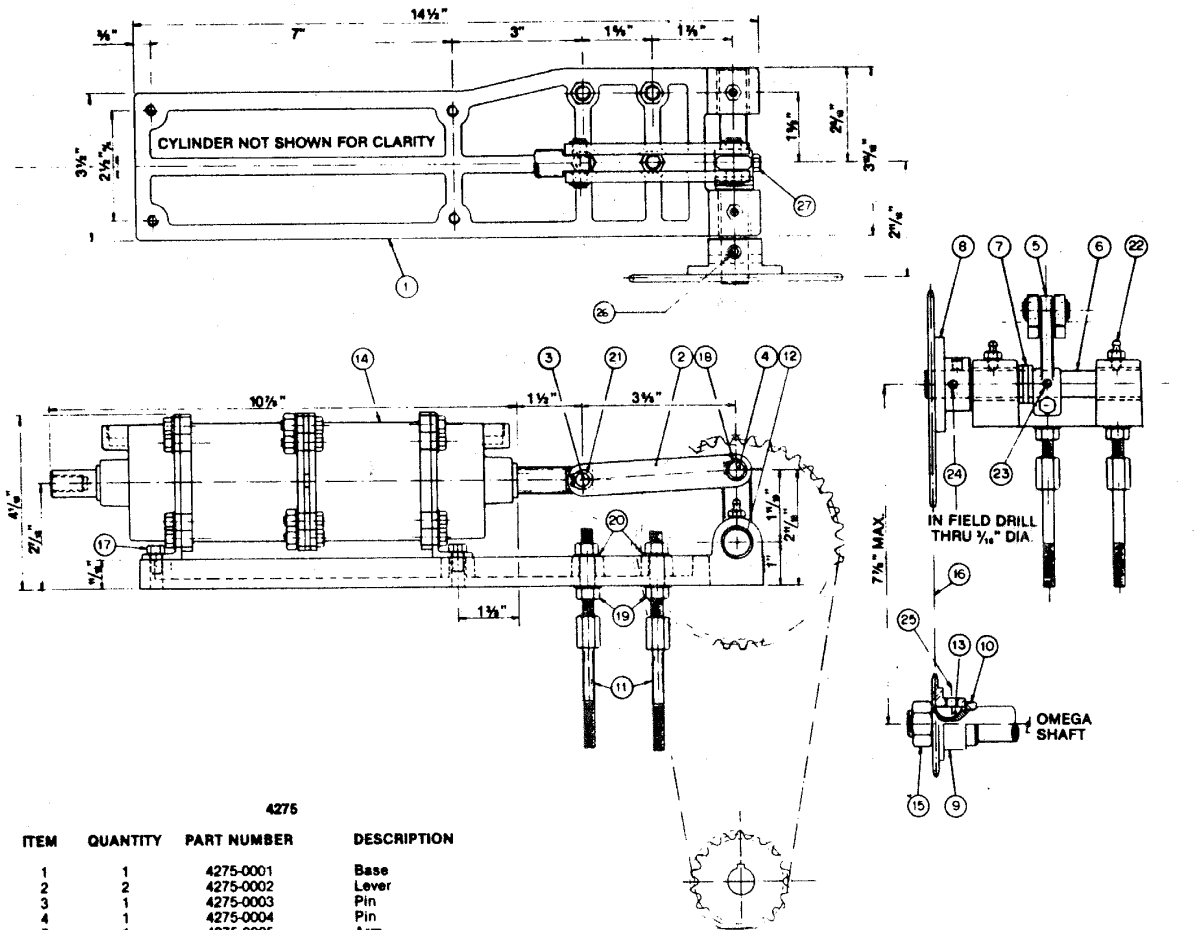
It is recommended to have approximately 1/4" to 3/8" total deflection in mid chain position applying approximately 5-10 lbs. Care must be taken to install the plate and sprocket assembly square to the control valve assembly. The nuts, item 19, must be securely locked after final adjustment. After this is accomplished the Omega gear must be placed in the neutral position. The control cylinder without air entering the control ports is automatically in neutral position. The sprocket, item 8, which is equipped with a set screw must be loosened and the sprocket must be rotated until the lower gear attached to the Omega shaft is in its neutral position. At this point the set screw and sprocket, item 8, can be secured. Care must be taken during this operation not to eliminate end play between lever, item 5, and sprocket, item 8. When the neutral position of our pneumatic control cylinder and the Omega Twin Disc gear coincide, a 3/16" hole must be drilled through the hub of the sprocket, item 8, and shaft, item 6. A 3/16" split pin must be installed to avoid slippage.

The pneumatic control cylinder, model 4221 attached to the adaptor bracket can be used for single or multi station remote control. It is however recommended that two shuttle valves be used at either end of the cylinder in conjunction with a pressure regulator (see drawing) in order to maintain a minimum of 3 psi pressure against the diaphragm at all times.



Illustrating control cylinder and Omega valve only.

DIMENSIONS AND PARTS



4275

ITEM	QUANTITY	PART NUMBER	DESCRIPTION
1	1	4275-0001	Base
2	2	4275-0002	Lever
3	1	4275-0003	Pin
4	1	4275-0004	Pin
5	1	4275-0005	Arm
6	1	4275-0006	Shaft
7	3	4275-0007	Spacer
8	1	4275-0008	35 B 40 Sprocket
9	1	4275-0009	35 B 18 Sprocket
10	1	4275-0010	Thrust Washer
11	4	4275-0011	Tensioner (1/8" Diameter)
12	2	4275-0012	Bushing
13	1	W-605	1/8" x 1/2" USA Std. Woodruff Key
14	1	4221	Self Centering, Two Direction Positioner Cylinder
15	1	1022-0316	Lock Nut (1/2" NC)
16	1	35 KCM	71 Links Riveted Single Strand Roller Chain 3/8" Pitch N° 35clw One Connecting Link
17	4	1001-1010	Hex. Head Capscrew 1/4"-20 NC x 1/2" LG)
18	2	1029-1037	Snap Ring
19	8	1022-0111	Nut (1/8" - 18 NC)
20	8	1023-0111	Flat Washer (1/8")
21	2	1029-1031	Snap Ring
22	2	1501-0301	Straight Grease Fitting Stainless Steel, 1/4"-28 NF Taper
23	1	1024-0616	1/8" O Spring Pin
24	1	1024-0820	1/8" O Spring Pin (To be located in field)
25	1	1016-1106	1/4" Hex. Set Screw, Cup Point
26	1	1016-1005	1/4" Hex. Set Screw, Cup Point
27	1	1001-1014	1/4" Hex. Capscrew

