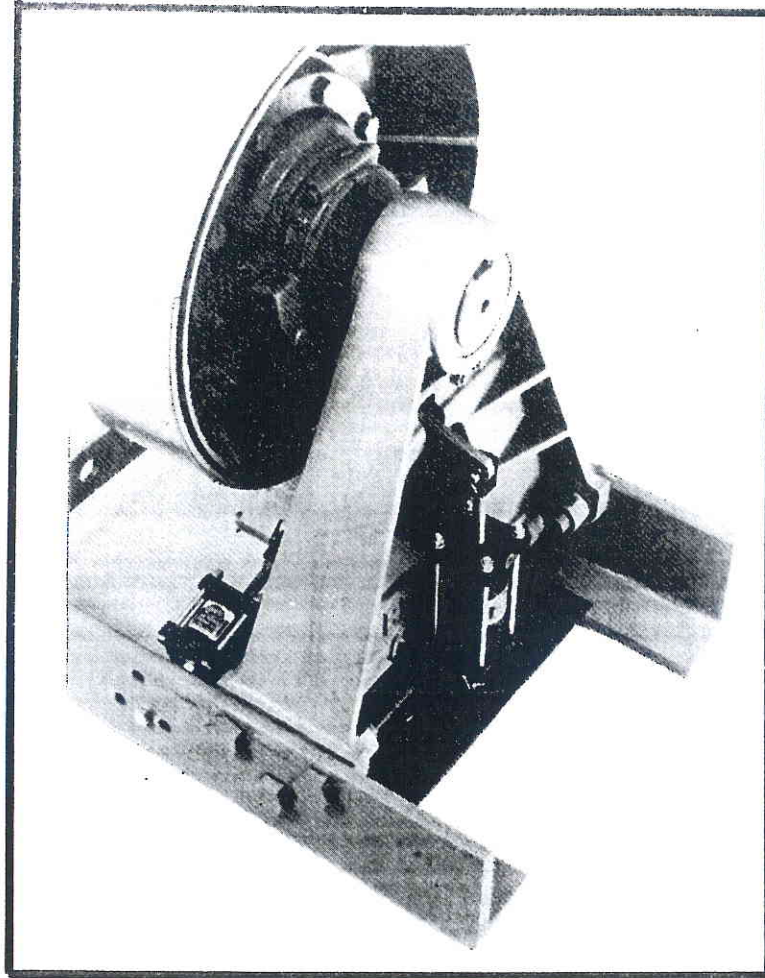


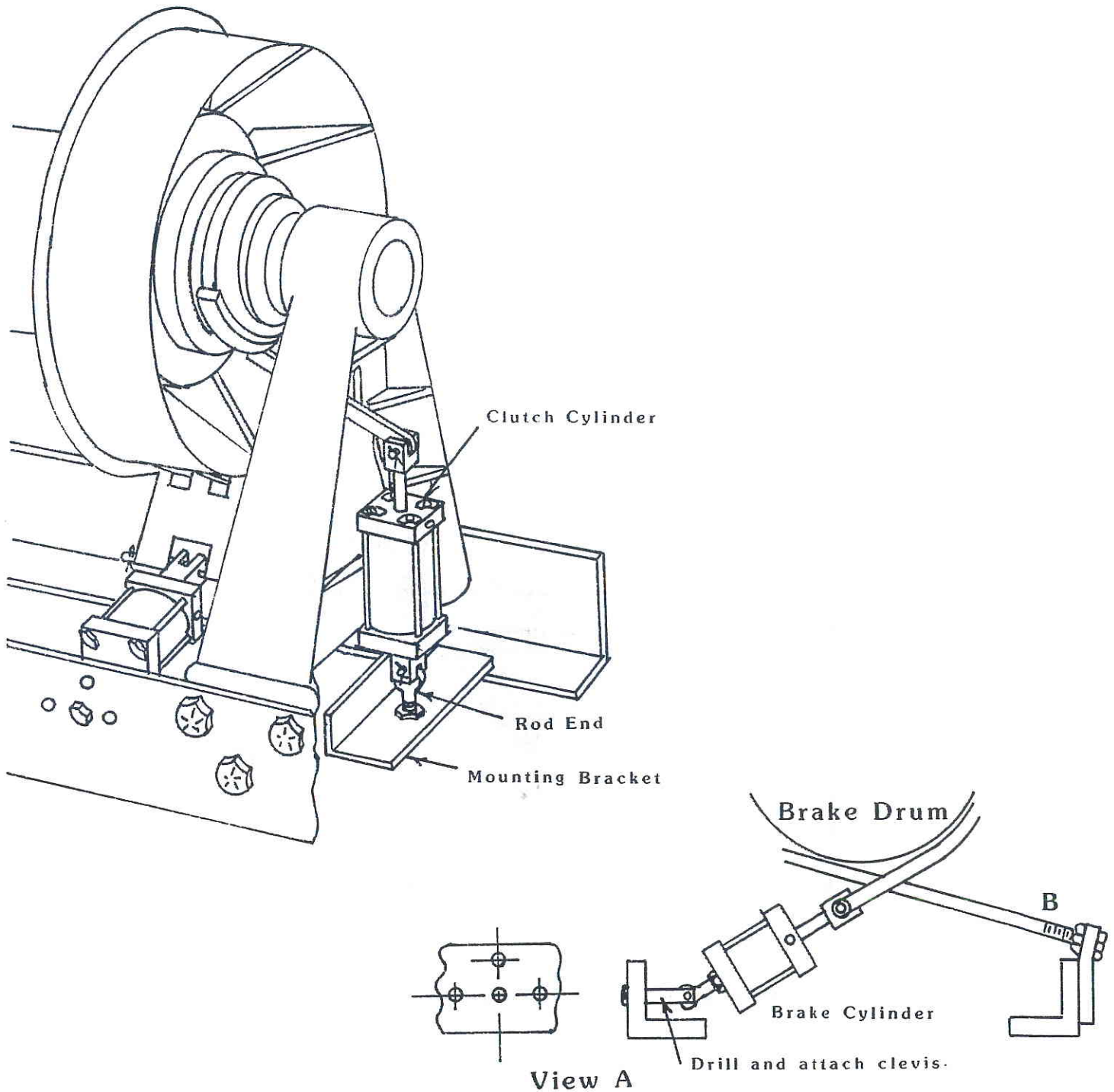


# INSTALLATION INSTRUCTIONS



**APSCO WBR & WDBR-50 KIT**  
for  
**BRADEN MS50 WINCH**

# Braden MS50 Winch APSCO WBR-50 & WDBR-50 Kit



Air Power Systems Co., Inc.  
P.O. Box 470948  
Tulsa, OK 74147 • Telex 796796  
(918)622-5600



# Installation Instructions

## WINCH PREPARATION:

Remove all linkage parts for clutch and drum brake except clutch yoke.

Winch clutches are engaged most of the time. Therefore, to prevent unnecessary wear and possible bending of clutch yoke, it is advisable to mount cylinder so that no force is exerted on the clutch yoke while in the engaged position. This can be accomplished by locating the mounting bracket so that the piston will "Bottom Out" in the cylinder.

## WINCH CLUTCH INSTALLATION:

Attach clevis to C-5190 cylinder and pin to clutch yoke, secure with cotter pin.

Attach rod eye end to mounting bracket with nuts. Pin clevis end of cylinder to rod eye end, secure with cotter pin.

Position clutch cylinder bracket (the yoke should not exert any force on clutch dog when clutch is engaged) and weld bracket in place.

## WINCH BRAKE INSTALLATION:

Locate and center between holes on winch base angle as shown, "View A". Drill 17/32" hole. Attach clevis and bolt through drilled hole.

Install furnished clevis on cylinder piston rod. Connect clevis to winch brake band with brake band pin and cotter.

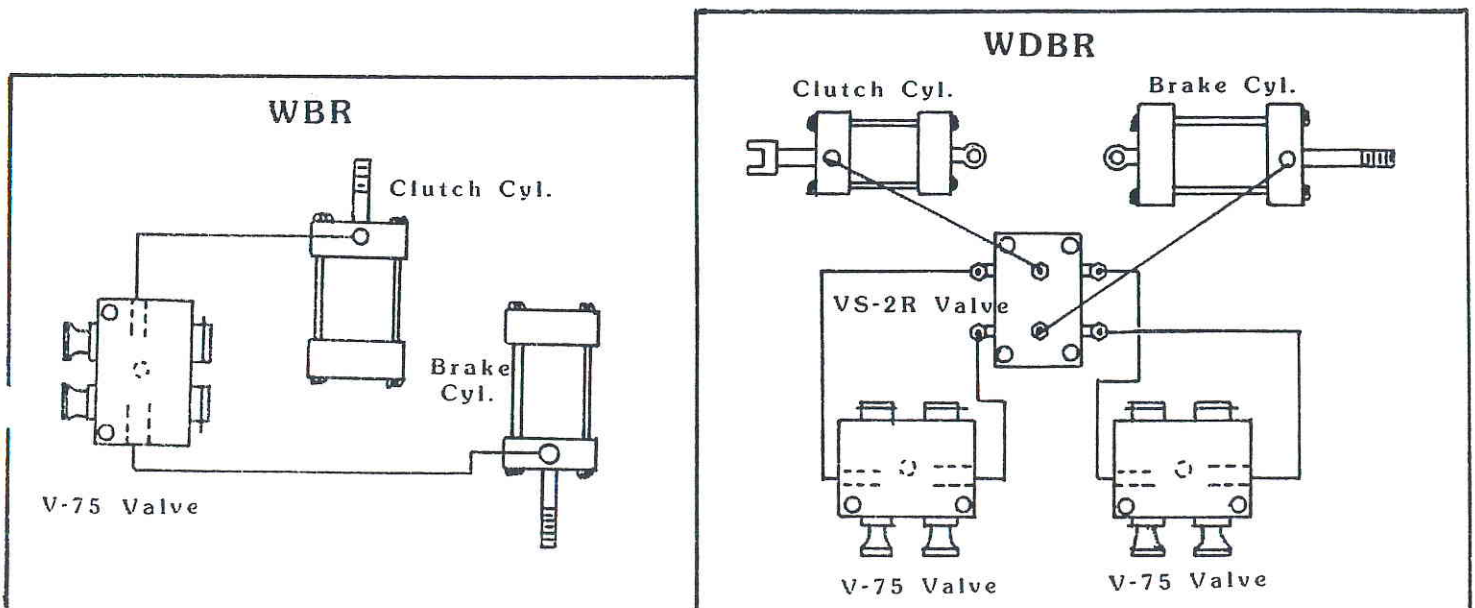
Attach eye bolt end of cylinder to clevis bolted on winch base angle.

If necessary, adjust at "B" so that the brake band does not grip drum until cylinder is activated.

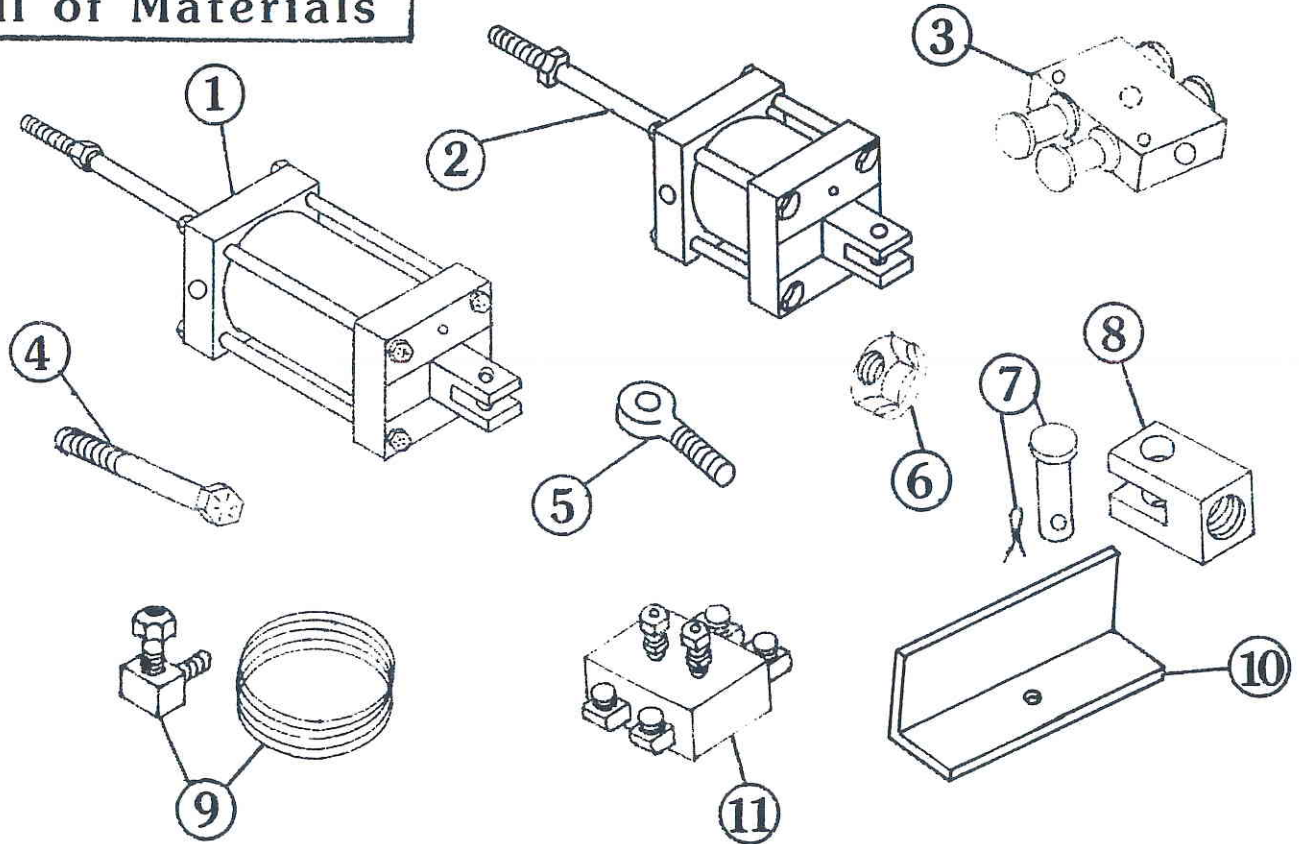
Install control valve or valves in desired location.

Connect tubing and fittings between cylinders and valve or valves. APPLY THREAD SEALANT TO ALL FITTINGS. SEE PLUMBING DIAGRAMS.

## PLUMBING DIAGRAMS



# Bill of Materials



ITEM	QTY	DESCRIPTION	PART	ITEM	QTY	DESCRIPTION	PART
1	1	Cylinder (Clutch)	C-5190	1	1	Cylinder (Clutch)	C-5190
2	1	Cylinder (Brake)	C-5250	2	1	Cylinder (Brake)	C-5250
3	1	Valve	V-75	3	2	Valve	V-75
4	1	Capscrew (1/2-20 x 1-1/4" LG)	1504	4	1	Capscrew (1/2-20 x 1-1/4" LG)	1504
5	1	Rod End	1209	5	1	Rod End	1209
6	2	Nut	1211	6	2	Nut	1211
7	3	Pin with Cotter Pin	1202	7	3	Pin with Cotter Pin	1202
8	2	Clevis	1299	8	2	Clevis	1299
8	1	Clevis	1233	8	1	Clevis	1233
9	1	Tubing and Fitting Kit	TF-8-P	9	1	Tubing and Fitting Kit	TF-14-P
10	1	Angle Bracket	1547	10	1	Angle Bracket	1547
				11	1	Shuttle Valve	VS-2R



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