# FIRE APPARATUS SERVICE AND MAINTENANCE PROGRAM







## AKRON SWING-OUT" VALVE

#### INSTALLATION INSTRUCTIONS

The improved Swing-Out Valve has several new features for better installation and operation. These include: For 7800 Series Tork-Lok® Valves

- One piece trunnion plate and Tork-Lok sleeve for improved operation
- Stainless steel trunnion plate for improved corrosion resistance
- New stop plate allows the handle position to be changed easily
- 1" valve upgraded to include the 1½" Tork-Lok mechanism
- · R-1 remote handle now cadmium plated solid steel
- The new 1½" to 3½" Tork-Lok mechanisms are interchangeable with existing valves

For 7600 Series Non Tork-Lok Valves

- New body design eliminates trunnion plate
- · New stop plate allows the handle position to be changed easily
- New SZ Twist-Lok handle provides improved locking, durability and adjustment for wear

#### INSTALLATION INSTRUCTIONS

There are many different handles and adapters available to suit various requirements. Select the ones that best suit your application.

Install the valve in either direction. All Swing-Out Valves are equipped with two seats so that they can hold either pressure or vacuum in both directions.

The maximum operating pressure for 1½", 2", 2½", 3" and 3½" valves is 500 PSI. The maximum operating pressure for 1" valves is 1000 PSI.

When installing threaded adapters, always use a wrench on the adapter adjacent to the pipe being connected. DO NOT TIGHTEN THE PIPE WITH A WRENCH ON THE VALVE BODY, OPPOSITE ADAPTER OR PIPE AT THE OTHER END OF THE VALVE. The flange bolts are not designed to withstand the stress of tightening pipes.

Each valve has been tested in both directions at the factory. If possible do not disassemble the valve to install it.

If it is necessary to disassemble the valve, always turn the ball to the open position before removing the flange bolts. In this position the valve body can be removed from between the flanges without affecting the plumbing. When reassembling the valve, THE BALL MUST BE IN THE CLOSED POSITION BEFORE THE BOLTS ARE TIGHTENED. The waterway through the ball is always parallel to the groove in the top of the handle trunnion.

Do not weld to or bend the steel handle. Contact Akron Brass for a special offset handle. Drilling an extra hole in the R-1 handle will not adversely affect the strength of the handle.





# FIRE PUMPER INSTALLATION FOR LIQUID LEVEL FLUIDMETER

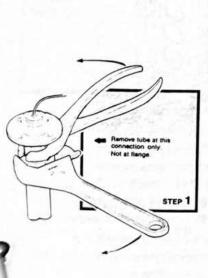
One Rabro Drive Hauppauge, NY 11788-4210 USA (516) 582-5252 Telex: 64-7034 1-800-843-6465 FAX-516-582-5341

FOUR LIGHT INDICATING BOX STEP 3 METER PANEL

CHECK ALL GAGES DAILY FOR PROPER OPERATION.

IF THIS UNIT IS TO BE USED ON A FIBERGLAS OR CHASSIS ISOLATED TANK, A GROUND WIRE IS NEEDED FROM THE SENSOR HEAD TO THE EADOUT BOX AND TRUCK CHASSIS.

# **CLEANABLE SENSOR**



AREAS

ORDER

WIPE OFF OIL OR DIRT
 FOR EXTREME HARD WATER

SPECIFY CLEANABLE SENSOR WITH YOUR NEXT

. MORE YEARS OF SERVICE

STEP 2 STEP 3

#### **STEPS**

WIRES FROM **BOTTOM OF** BOX

STEP 5

1. Drill 1½" (38mm) hole in top of water

BULB RED

BEZEL PLATE LENS

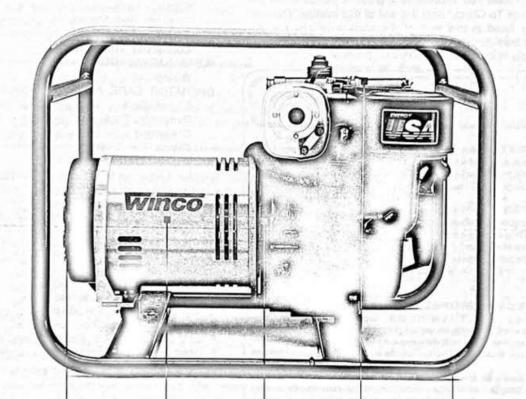
- 2. Insert sensor thru newly drilled hole in top of tank and using sensor head as a template, transfer drill and tap (4) 1/4" (6mm) screws. After tapping, firmly screw down sensor and route cable to back of meter panel.
- Using bezel plate as a template, mark off holes on meter panel and drill (4) 3/4" (19mm) holes and (2) 3/16" (5mm) holes. Then sandwich together as shown with furnished mounting screws.
- Plug molded connectors together.
- 5. Splice yellow wire to ignition or hot line as very last step.
- Plug insulated connectors together-grey wires (or both to chassis ground). 11-FOOT EXTENSION CABLES FURNISHED ON REQUEST.



# POWERMIGHT Series

OWNERS MANUAL

DP4500/N DP4500E/N DP6000E/M



POWER PANEL

Receptacles mounted in generator end cover

GENERATOR
Powerful, efficient
"Maxi-Watt II"
brushless A.C.
Generator

ENGINE Briggs & Stratten, 4-cycle, air cooled, gasoline engine

Extra-quiet muffler with USDA approved spark arrester Compact engine mounted fuel tank

FRAME Full wraparound frame for complete protection

MINCO GENERATORS

225 South Cordova Avenue Le Center, Minnesota 56057



## UNDERWRITERS LABORATORIES INC.

333 PFINGSTEN ROAD · NORTHBROOK, ILLINOIS 60062

an independent, not-for-profit organization testing for public safety

## CERTIFICATE OF INSPECTION FOR FIRE DEPARTMENT PUMPER

The scope of the UL Certification Program is limited to witnessing the conduct of the tests reported below and the checking of only those controls, instruments, and equipment necessary to accomplish this testing against the requirements of the Edition of the NFPA Standard No. 1901 in effect as of the date of this certificate unless otherwise noted.

	RATED C	APACITY .	750	gpm gpm	Dat	e Jan. 23	, 1991	
equipment as sl	ries mai me pumpe	er described	below has perfe	ormed acceptab	ly and is provi	ded with iten	ns of	
Manufacturer:	Central State	s Fire A	pp. Inc.	Model No	CM7.50		Serial No1	27691
Chassis, Mil.,	Auburn Fire I			Model No	Kodiak		Serial No. 91.	T203457
Engine: Mir	Chrysler Mfr. Fuller	and the same the same training		Model No.	3180VT		Serial No VI	120/50
Pump: MIr	w.s. Darley			Model No.	TF-750		Serial No. 58	17
Test Conditions	s: Barometric Pres Size4in	sure 29.	84 in. Hg. (c	orrected to Sea	Level); Temp.	15 I	F: Elevation	1451 ft.:
Performance C	ertified to	7 77 81	2000	ft. Elevation	above Sea Leve	L		
TEST	PUMP CONTROL POSITION	FLOW GPM	DISCHARGE PRESSURE PSIG	SUCTION ALLOWANCE PSIG (NEG.)	NET PUMP PRESSURE PSI	PUMP SPEED RPM	ENGINE SPEED RPM	GEAR RAT
anacity	Single	5 b 7 ll 57 lb			THE HEAT SEE			II-fell seek

TEST	PUMP CONTROL POSITION	FLOW GPM	DISCHARGE PRESSURE PSIG	SUCTION ALLOWANCE PSIG (NEG.)	NET PUMP PRESSURE PSI	PUMP SPEED RPM	ENGINE SPEED RPM	GEAR RATIO ENGINE TO PUMP
Capacity 150-psi—2 Hrs.	Single Stage	750	144	6	150	2753	2753	1:1
Overload 165 psi-10 Min.	Single Stage	750	159	6	165	2884	2884	1:1
70% Capacity 200 psi-30 Min.	Single Stage	525	195	5	200	3027	3027	1:1
50% Capacity 250 psi-30 Min.	Single Stage	375	245	5	250	3285	3285	1:1

Automatic Pressure Control Test: Max. Increase 12 psi. Vacuum Test: 1 in. Hg. drop in 5 Min. No Load Governor Speed 3600 rpm; Specified 4000 rpm. Pump Location Midship Crossmount

Water Tank Capacity 750 Gal; Tank Flow Test: 695 Gal. discharged at 250 gpm

4\frac{1}{2} In. Suction gauge 30 In. Hg. to 600 psi

REMARKS

\* Aux. Pumping Engine

Not Valid Unless Countersigned

K&M Company

LINE TO THE STATE OF THE STATE

UNDERWRITERS LABORATORIES INC.

Signed: Robert H. Levine

ROBERT H. LEVINE Vice President and Chief Engineer Follow-Up Services

CERTIFICATE NO. 74689

## \* MANUFACTURER'S RECORD OF PUMPER CONSTRUCTION DETAILS \*

DATE \_01\_/\_23\_/\_91\_

OwnerAUBURN FIRE DEPARTMENTAddress_AUBURN, NE68305
Owner Nanufacturer_CENTRAL STATES FIRE APModel750 CMSer127691
Engine MakeCHRYSLERModel_3180YJSer. #K1120658
No.Cyl8Bore3.91Stroke3.31Displ318Cubic Inch
Rated HP_175at_4000_RPM No Load Governed RPM3600
Compression Ratio8.6:1 TypeGASOLINE
System Voltage12Volts Alternator Output70Amp
Battery:Capacity each Battery650 eachCCA
Battery: Make and ModelNAPAThe Legend
Fuel Tank Capacity:50gallons
Cooling System: Heat Exchanger?YESRadiator Refill?NO
Transmission: Make_FULLERModel_FS4005BSer.#_86101806Type_MANUAL
Drive to Pump through transmission?_NOSpecial ClutchNO
Gear Ratio Engine to Pump1:1 Transmission gear ratio used
Pump Make_W.S. DARLEYModel_TF-750Rated Capacity750GPM
Serial #5817No. Stages1Impeller Dia13"
Priming Device TypeElectric vaccum pump
Relief Valve?YESPressure Governor?NO
Separate Booster Pump_NONEMakeModel
Booster Tank Capacity750gallons.
Chassis MakeCHEVROLETModel_KODIAKSer. #_1GBL7H1P9LT203457
GAWR Front10,860lbs. Rear21,000lbs
Tires: Front Size10.00_X_20rated Capacity Total10,860lbs
Tires: Rear Size10.00_X_20_rated Capacity Total21,200lbs
Chassis Weight Distribution with water and equipment FRONT6,360lbs
Chassis Weight Distribution with water and equipment REAR14,860lbs
COMPANYCENTRAL STATES FIRE APPARATUS, INC
ADDRESS100 Main StreetLyons, South Dakota57041
Signed by Al Hansen Title TEST ENGINEER

#### W. S. DARLEY & COMPANY 2000 ANSON DRIVE MELROSE PARK, ILLINOIS

	p for city of _	-	Busen Type of Pum		le Stage rifugal	Date	TF750	A employ		
Serial No	77.77		. Type of I dilly		110/100			1197		
Pump No				Engine N	Make & Mode	1 310 CH	Lysici			
Certified Go	verned RPM		Brake							
Transmission	Gear		_ Pump Gear I	Ratio	HALES	Impeller Dia	meter	13"		
	es in: Parallel			- CON 199						
Test Condition										
ENGINE RPM	PUMP RPM	BRAKE HP	NOZZLE DIA. IN.	NOZZLE PSI	FLOW GPM	VACUUM IN. HG.	DISCH PSI	NET PUM PRESS-PS		
2728		103.8	1-1/4" 1-1/4"	66 66	750	17.4"	142	150		
3006		103.5	1-1/2"	62	525	12.7"	194	200		
3245		106.2	1-1/4"	66	375	11"	245	250		
2870		116.3	1-1/4"	66	750	17,4"	157	165		
			1-1/4"	66						
at the foregove sea level aximum frigers in. Historia to NFP arley & Co.	coing results rel at a wate iction and of g. Pump has A No. 1901 mounted of	will be ober temp. 60 entrance les been teste 3-2.2.5.4 in the pum		lift of up theric press 20 ft. of tatic press tatic press requirem	o 10 ft. at a ure 29.92 in suction hos ire of 500 ps	e and strai	not excee ected to so ner (at e inutes. Pu lves suppl	ea level, and of hose imp will contied by W.S.		
	st: (at Draft)		ırs							
LUOD Harri	atic Suction Lift: 10' Ft.				Tested By: Anthony Monpas  . Witnessed By: Lee Kelly					