

# MULTI-MEASURE

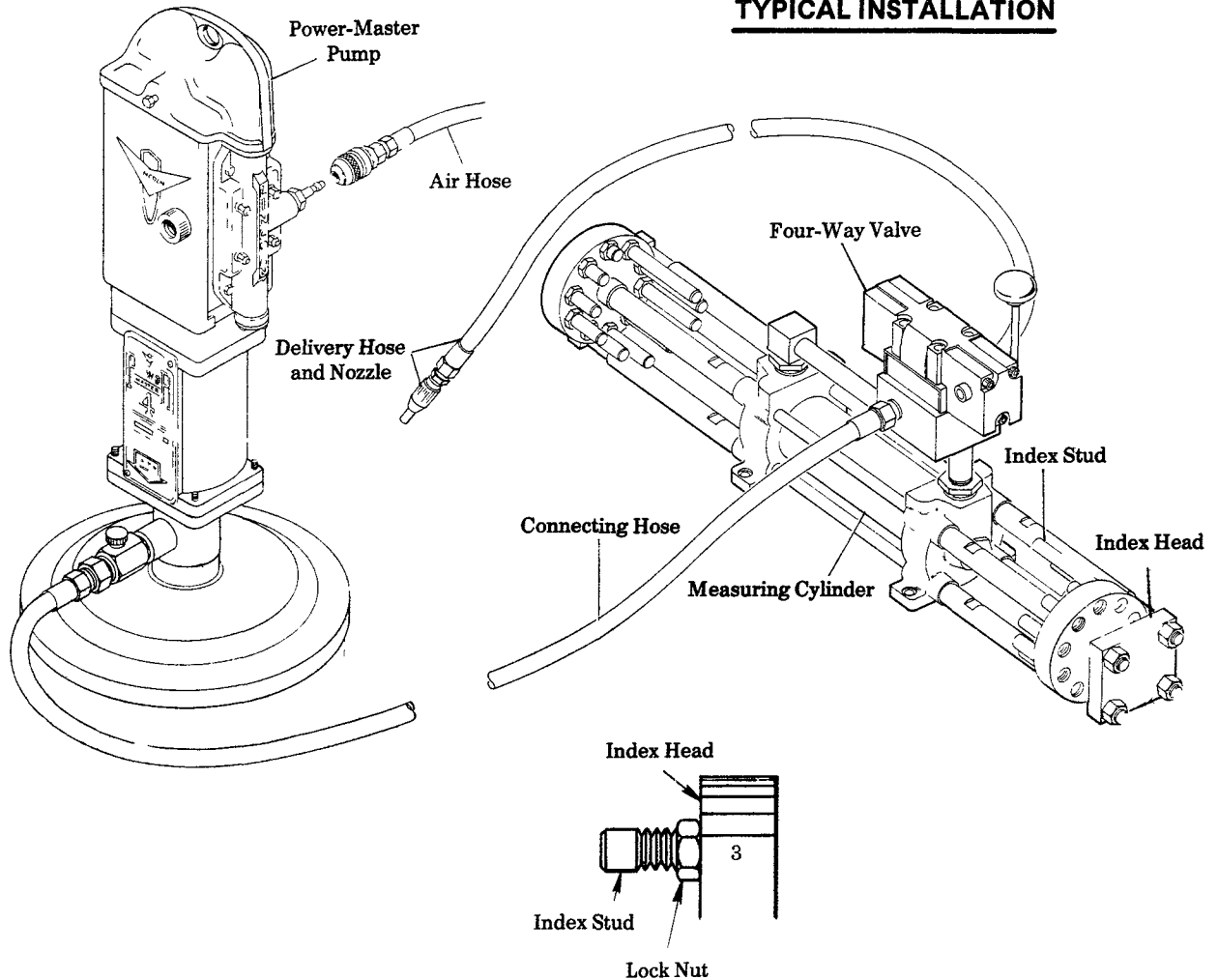
1,000 PSI MAXIMUM



# Model 83232

## Series "D"

### TYPICAL INSTALLATION



### DESCRIPTION

Model 83232 Multi-Measure consists of a four-way valve and a measuring cylinder having an adjustable stroke. The cylinder stroke, and thus its output, is controlled by studs in dual index heads.

Ten preset outputs from 0 cu. in. to 34.7 cu. in. may be selected by manually rotating the index heads. For fast selection, index head positions are numbered from 1 through 10.

### OPERATION

The multi-measure may be mounted either horizontally or vertically in a location convenient for the operator.

A connecting hose conveys material from the pump to the

multi-measure inlet (3/4" NPT, female). A delivery hose with a non-drip nozzle is connected to the multi-measure outlet (3/4" NPT, female) and is used to dispense the measured quantity of material.

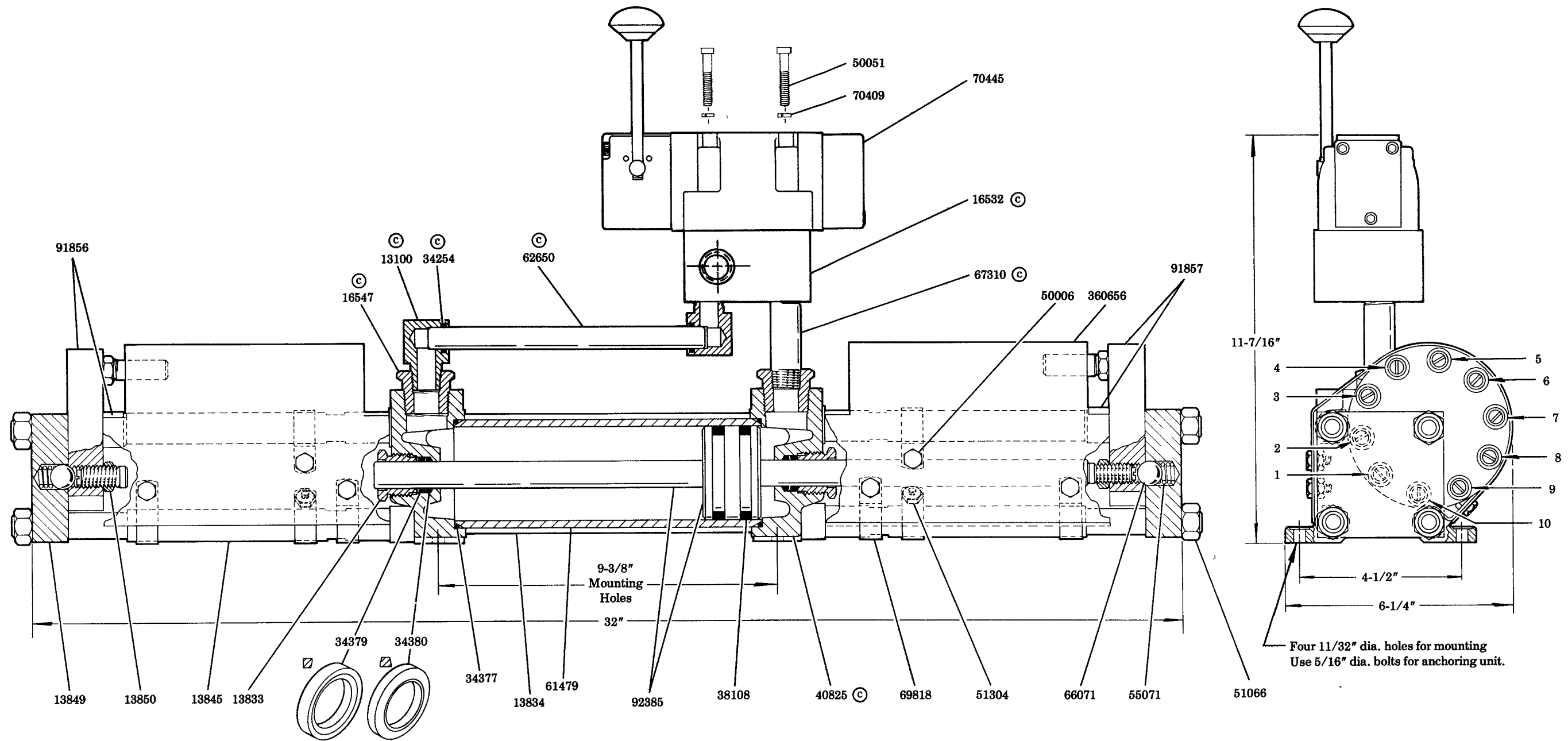
Ten index studs of different lengths are mounted in each index head. To set the multi-measure for a specific output, consult the output chart on the inside page and set both index heads accordingly.

For example: If 10 cu. in. are desired, both index heads should be set at position 7 which would be the output range of 8.6 to 12.6 cu. in. The exact quantity desired is then obtained by adjusting the distance the index studs protrude from the index head.

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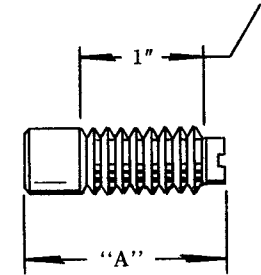


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© Indicates change

Min. Effective Thread.



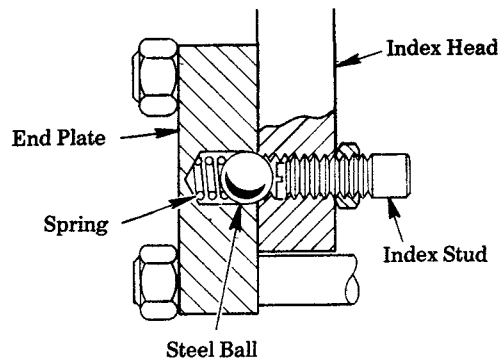
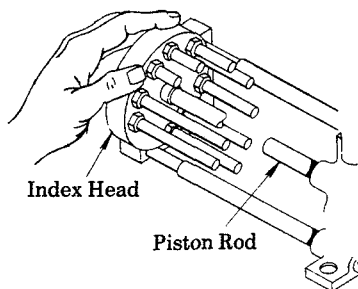
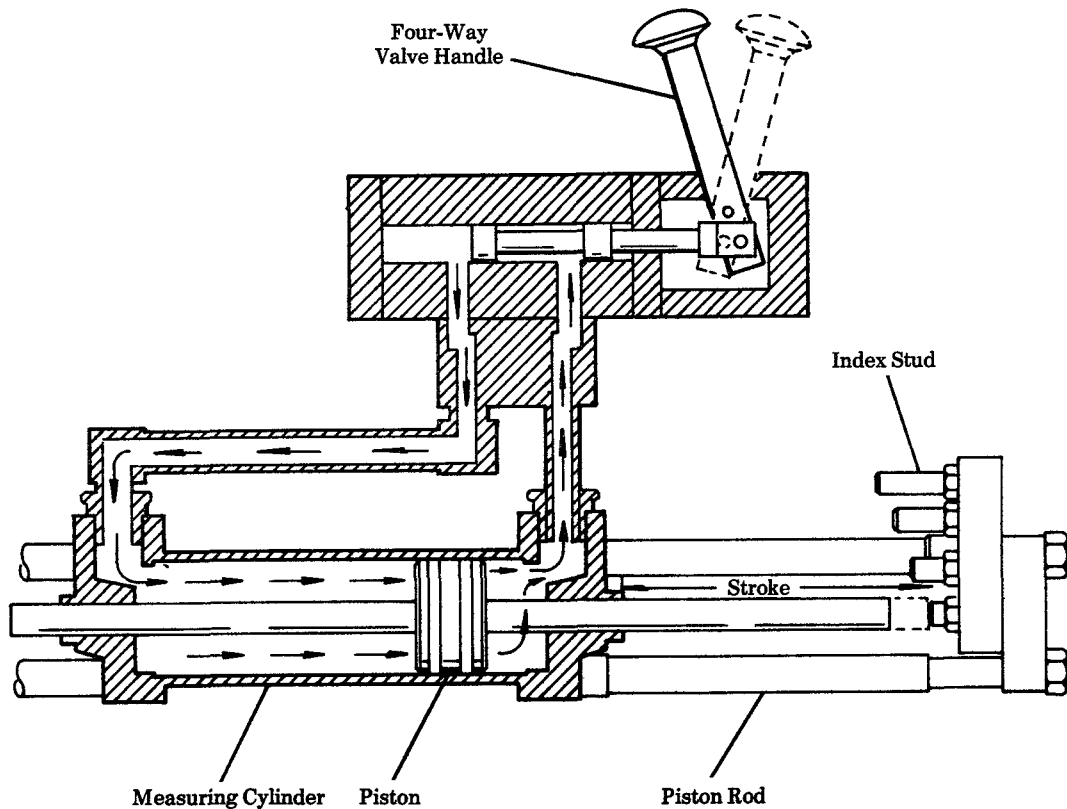
INDEX STUD

**OUTPUT CHART**

INDEX CODE	INDEX STUD	QUAN.	STUD LENGTH "A"	OUTPUT RANGE IN CUBIC INCHES
1	13835	2	1-5/16"	31.2 - 34.7
2	13836	2	1-45/64"	27.2 - 31.2
3	13837	2	2-3/32"	23.2 - 27.2
4	13838	2	2-31/64"	19.2 - 23.2
5	13839	2	2-7/8"	15.5 - 19.2
6	13840	2	3-5/32"	12.6 - 16.6
7	13841	2	3-35/64"	8.6 - 12.6
8	13842	2	3-15/16"	4.9 - 8.6
9	13843	2	4-21/64"	1 - 4.9
10	13844	2	4-23/32"	0 - 1

**SERVICE PARTS**

PART	QUAN.	DESCRIPTION	PART	QUAN.	DESCRIPTION	PART	QUAN.	DESCRIPTION
13100	2	Elbow	34379	2	Packing	62650	1	Tube
13833	2	Packing retainer	34380	2	Packing	66071	2	Steel ball
13834	4	Tie rod	38108	2	Packing	67310	1	Nipple
13845	8	Tie rod	40825	2	Cylinder end	69818	8	Tube clamp (closed)
13849	2	End plate	50006	8	Bolt	70409	4	Lockwasher
13850	20	Jam nut	50051	4	Screw	70445	1	Four-way valve
16532	1	Baseplate	51066	8	Nut	91856	1	Index head (left)
16547	2	Adapter	51304	8	Nut	91857	1	Index head (right)
34254	2	O-ring	55071	2	Spring	92385	1	Piston & plunger rod
34377	2	O-ring	61479	1	Tube	360656	2	Guard



## **FLOW DIAGRAM**

Material flows into the four-way valve inlet and into one end of the measuring cylinder. Material pressure moves the piston toward the opposite cylinder end until the piston rod contacts an index stud. As the piston moves, it forces material from the opposite cylinder end through the four-way valve and out through the delivery hose. After the piston rod contacts the index stud, pressure builds up and the air-powered pump stalls.

Reversing the position of the four-way valve handle causes the flow of material to the measuring cylinder to be reversed. An identical output will be obtained as the piston will travel the same distance during both strokes.

## **TROUBLESHOOTING**

**PROBLEM:**  
Inaccurate delivery of output.

**CAUSE:**

- A) Material may be bypassing the 38108 Piston Packings. Inspect the 61479 Tube for wear or damage.
- B) The body or spool of the four-way valve may be worn or scored.
- C) An air pocket may have formed in the measuring cylinder.

**PROBLEM:**  
Leakage around piston rod.

**CAUSE:**

- 34379 and 34380 Packings may be worn or loose. Tighten 13833 Packing Retainer until leakage stops. If leakage continues, replace packings and inspect the piston rod for damage.

**RETAIN THIS INFORMATION FOR FUTURE REFERENCE**

When ordering replacement parts, list: Part Number, Description, Model Number, and Series Letter.

LINCOLN ST. LOUIS provides a Distributor Network that stocks equipment and replacement parts.

A list of Authorized Service Departments will be furnished upon request.