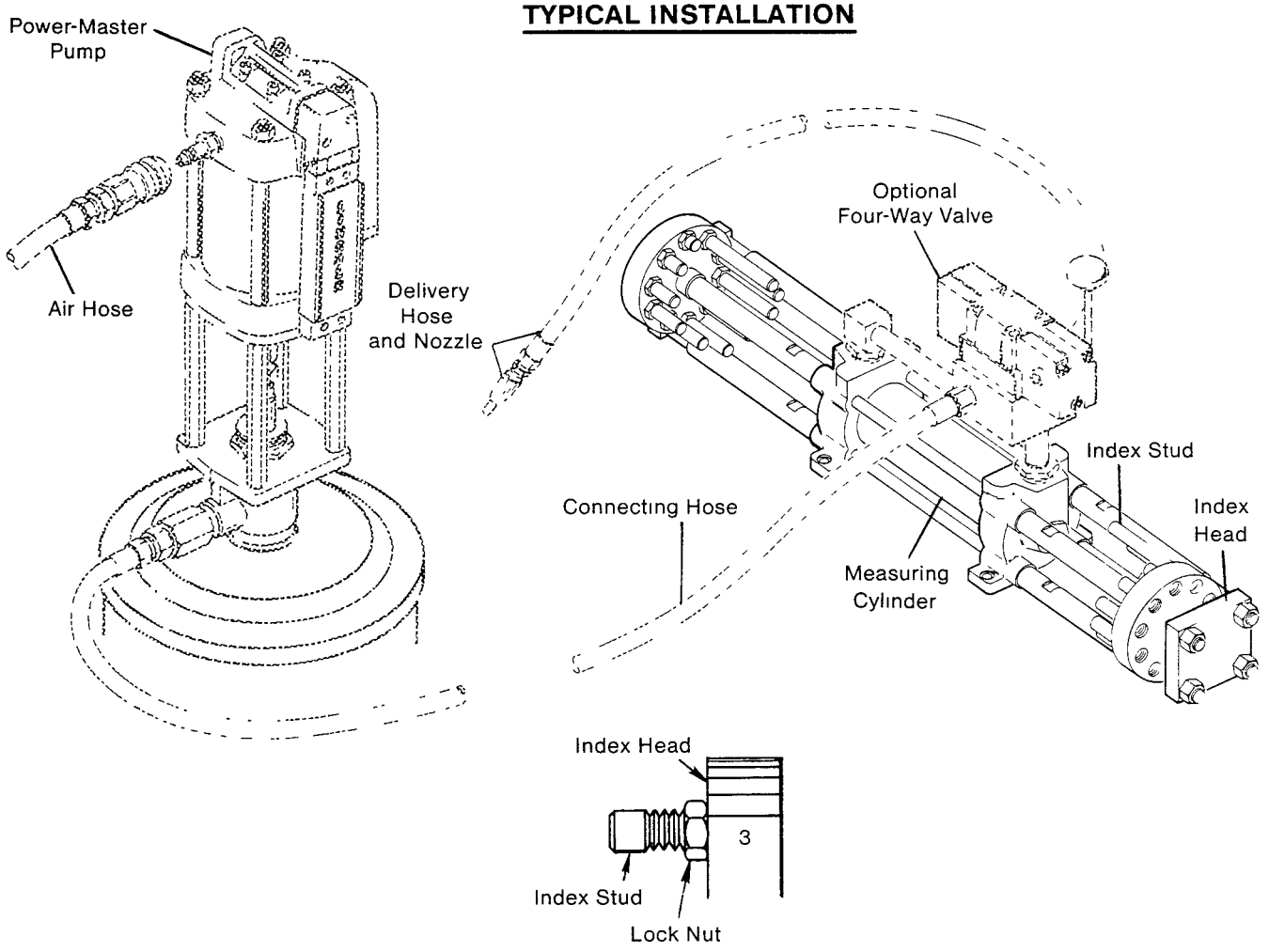
LINCOLN
A PENTAIR COMPANY

Model 83232
MULTI-MEASURE
Series "E"

1,000 PSI MAXIMUM

TYPICAL INSTALLATION



DESCRIPTION

Model 83232 Multi-Measure consists of 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 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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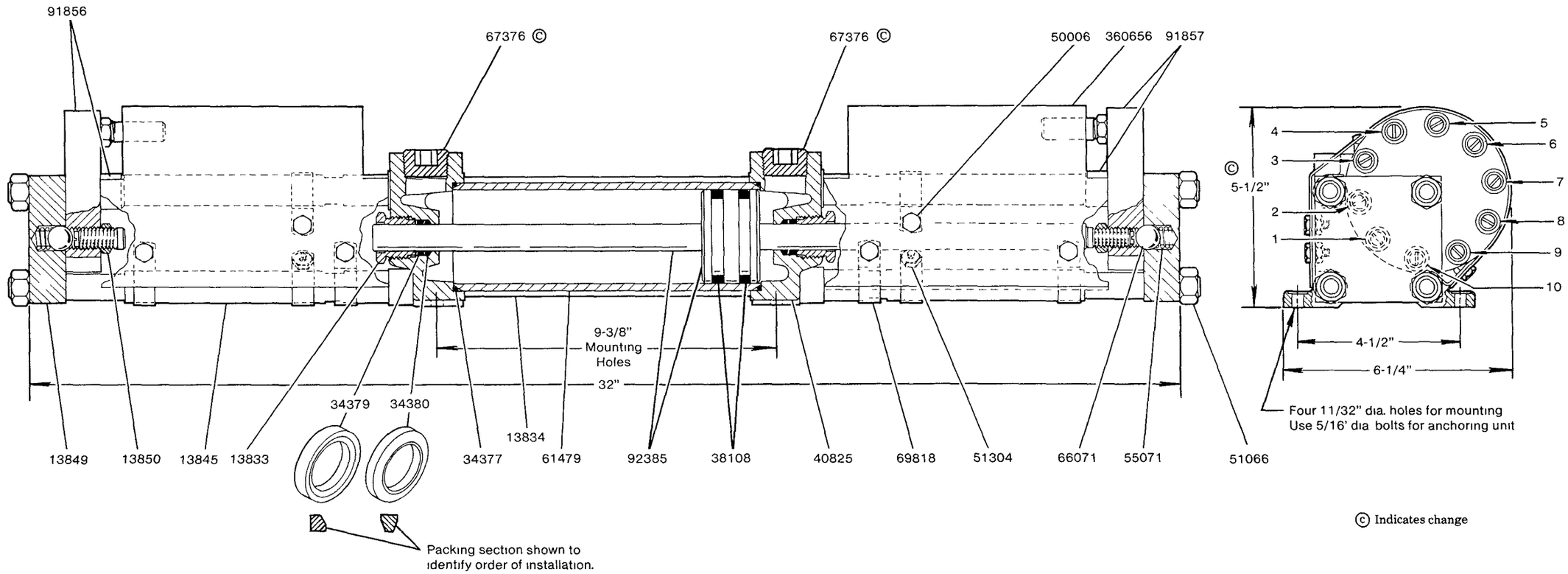

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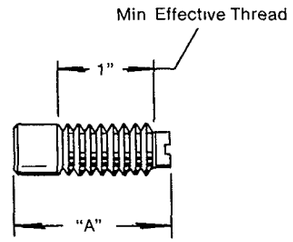


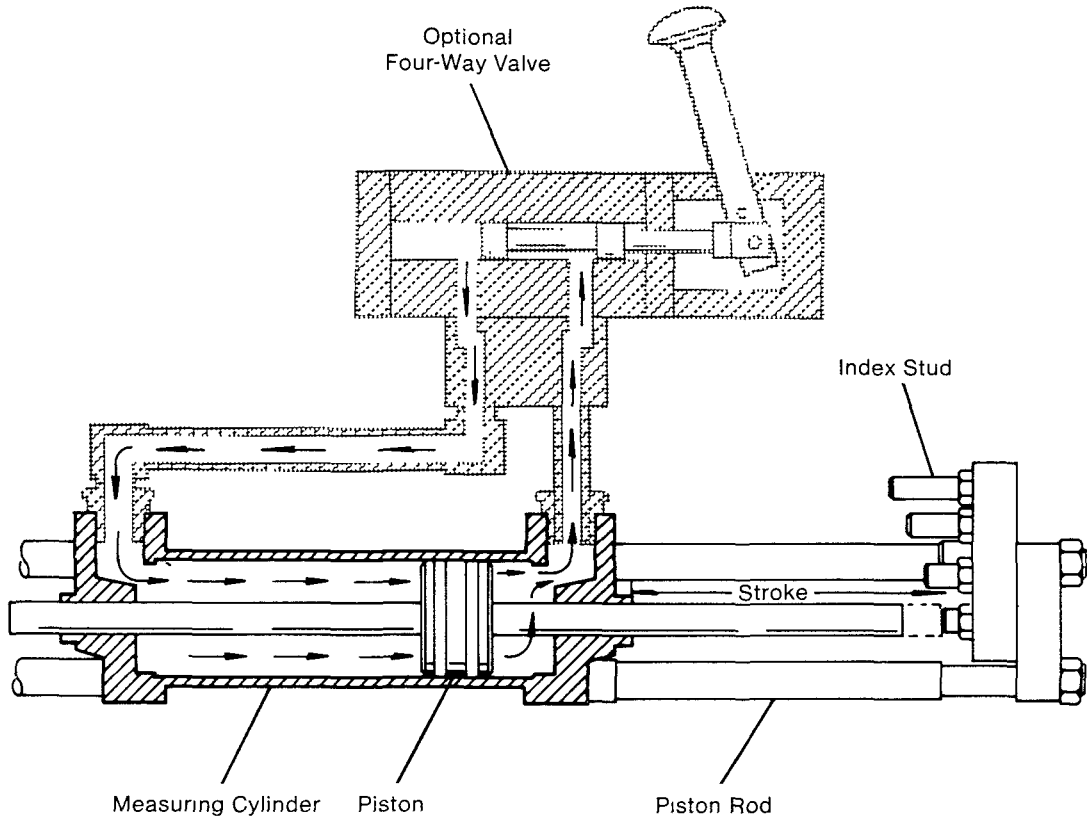
INDEX STUD

OUTPUT CHART

INDEX CODE	INDEX STUD	QTY.	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

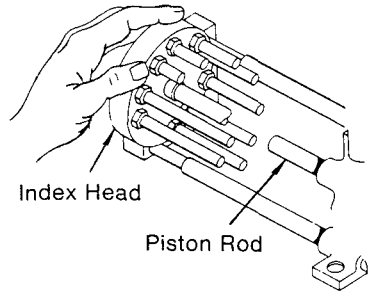
Part	Qty.	Description	Part	Qty.	Description	Part	Qty.	Description
13833	2	Packing retainer	38108	2	Packing (Teflon)	66071	2	Steel ball
13834	4	Tie rod	40825	2	Cylinder end	67376	2	Pipe plug
13845	8	Tie rod	50006	8	Bolt	69818	8	Tube clamp (closed)
13849	2	End plate	51066	8	Nut	91856	1	Index head (left)
13850	20	Jam nut	51304	8	Nut	91857	1	Index head (right)
34377	2	O-ring (Buna-N)	55071	2	Spring	92385	1	Piston & plunger rod
34379	2	Packing (Teflon)	61479	1	Tube	360656	2	Guard
34380	2	Packing (Teflon)						

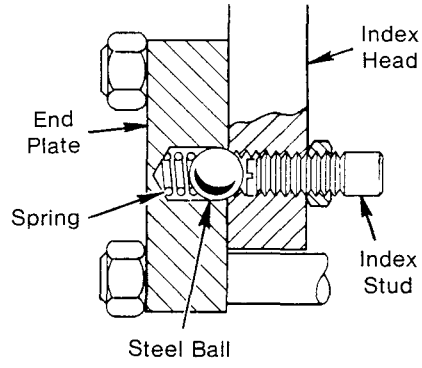


FLOW DIAGRAM

Material flows into the inlet of the four-way valve (not included) 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 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 provides a Distributor Network that stocks equipment and replacement parts.