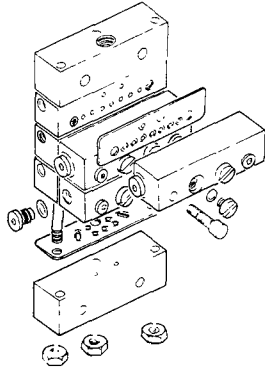


## SPECIFICATIONS:

Max. Operating Pressure	Seal Material	Lube Inlet	Lube Outlets	Indicator Ports	Mounting Screw Torque	Tie Rod Nut Torque
3500 Psi	Nitrile	1/4 NPTF	1/8 NPTF	5/16"-24 UNF	108 in.-lb.	72 in.-lb.



## DESCRIPTION

ML Divider Valves are comprised of three to eight valve blocks fastened to a segmented baseplate with gasket plate seals between the valve blocks and the baseplate and between the baseplate segments. These divider valves are used in a single line, progressive lubrication system and can be used for dispensing oil or grease. ML valves and baseplate segments are supplied with nitrile seals, however viton seals are available.

Refer to the Modular Lube Planning Manual for system design information and an in-depth explanation of operation. An in-line filter should be installed between the pump and divider valves. Check valves should be installed at the inlets of all bearing points. Refer to Service Page M50 Page 1 for check valve information.

Valve blocks containing metering pistons discharge a predetermined amount of lubricant with each cycle. Valve blocks can be single or twin and can be externally singled or crossported with Model 87904 Single/Crossport Bar. Outlets not to be used when singling or crossporting must be plugged. Use 68645 pipe plug.

An 872000 By-Pass Block can be used in any position on the baseplate. The use of a by-pass block allows the addition or deletion of lubrication points without disturbing existing piping. Both outlets under a by-pass block must be plugged.

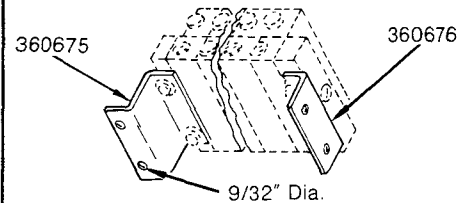
The valve blocks and by-pass blocks are fastened to a baseplate mounted on the machine to be lubricated. The baseplate contains the divider valve's inlet and outlet connections, interrelated passageways and built-in check valves. All piping of lubricant to and from the divider valve is connected to the baseplate.

The baseplate consists of one inlet block, three to eight intermediate blocks, one end block and three tie rods. Gasket plate seals are included with the baseplate segments. The valve block capacity of each baseplate is dependent upon the number of intermediate blocks in the baseplate. There must be a minimum of three working valves on each valve and baseplate assembly.

Optional cycle indicator pins provide positive identification of system operation. The indicator pin is an extension of the piston

in a valve block and will cycle back and forth as the piston moves.

Optional mounting brackets are shown below for mounting the valve assembly.



## ASSEMBLY INSTRUCTIONS

NOTE: The center tie rod in the baseplate is offset so that the intermediate blocks cannot be assembled backwards. If excessive force is encountered during assembly, make sure block is not backwards.

1. Screw three tie rods into inlet block until ends are flush with surface of block.
2. Slide inlet gasket onto tie rods
3. Alternately slide an intermediate block and an intermediate gasket plate onto the tie rods until the last intermediate block is in place.
4. Discard remaining intermediate gasket plate.
5. Slide end gasket plate and end block onto tie rods.
6. Lay baseplate assembly on flat surface and torque nuts to 72 in-lbs.
7. Mount divider valves with gasket plates onto baseplate and torque mounting screws to 108 in-lbs

## ML VALVE BLOCKS

	Single	Twin	Cycle Indicator Pin				Single (1 Outlet) Discharge/Outlet	Twin (2 Outlets) Discharge/Outlet
			Single-Right	Twin-Right	Single-Left	Twin-Left		
ML-5	872051	872052	-	-	-	-	.010 cu. in.	.005 cu. in.
ML-10	872101	872102	-	-	-	-	.020 cu. in.	.010 cu. in.
ML-15	872151	872152	-	-	-	-	.030 cu. in.	.015 cu. in.
ML-20	872201	872202	872203	872204	872205	872206	.040 cu. in.	.020 cu. in.
ML-25	872251	872252	872253	872254	872255	872256	.050 cu. in.	.025 cu. in.
ML-30	872301	872302	872303	872304	872305	872306	.060 cu. in.	.030 cu. in.
ML-35	872351	872352	872353	872354	872355	872356	.070 cu. in.	.035 cu. in.
ML-40	872401	872402	872403	872404	872405	872406	.080 cu. in.	.040 cu. in.

## ML BASEPLATES

Baseplate Designation	Outlets	Inlet Block	Intermediate Blocks	End Block	Tie Rods
ML-3	2-6	87909	(3)87910	87911	(3)236640
ML-4	2-8	87909	(4)87910	87911	(3)236641
ML-5	2-10	87909	(5)87910	87911	(3)236642
ML-6	2-12	87909	(6)87910	87911	(3)236643
ML-7	2-14	87909	(7)87910	87911	(3)236644
ML-8	2-16	87909	(8)87910	87911	(3)236645

**OPERATION**

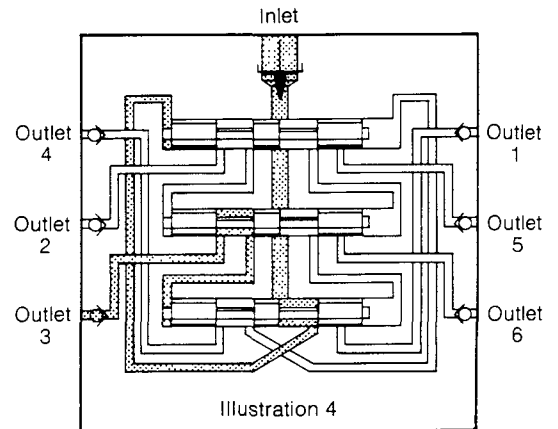
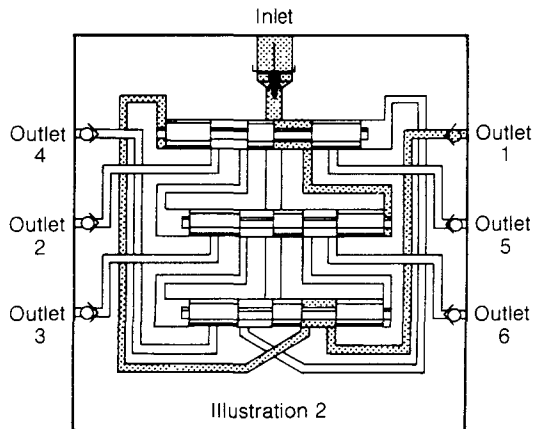
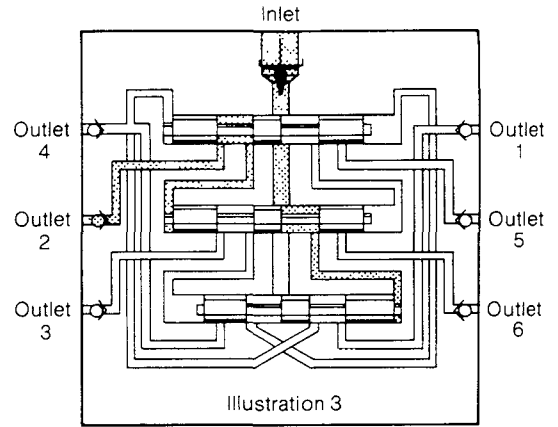
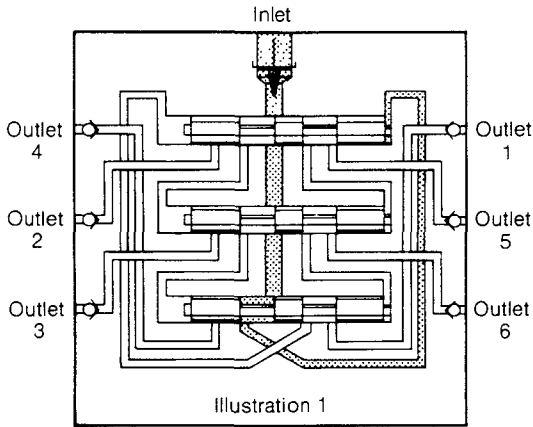
The inlet passageway is connected to all piston chambers at all times with only one piston free to move at any one time. With all pistons at the far right, lubricant from the inlet flows against the right end of piston 1. (See illustration 1)

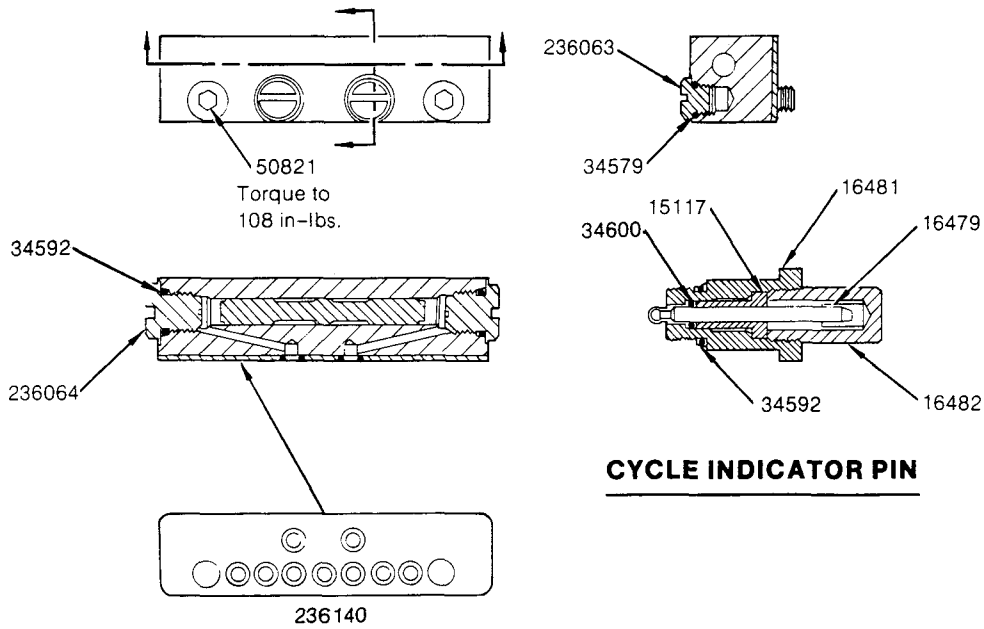
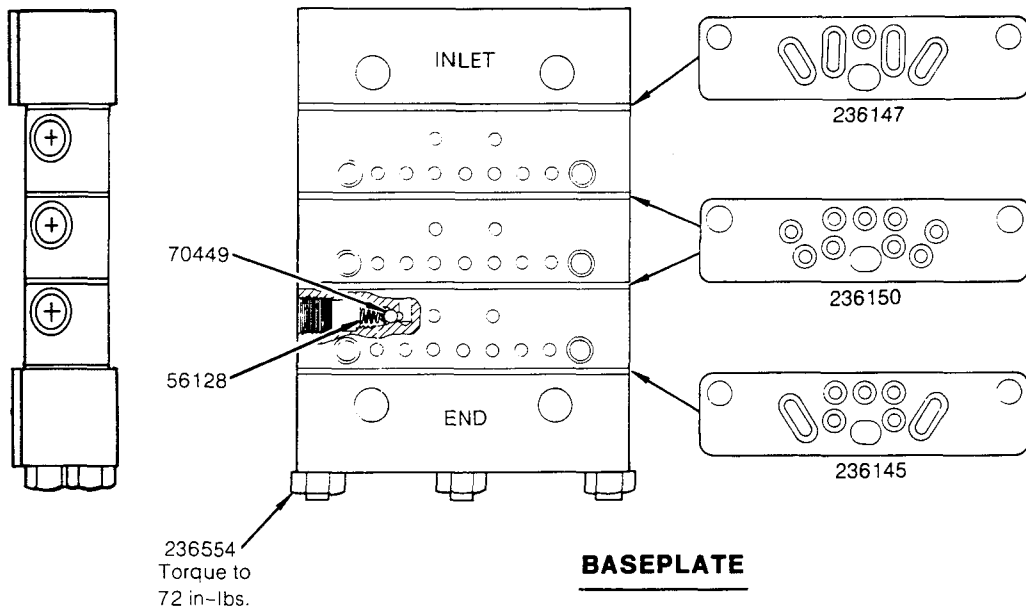
Lubricant flow shifts piston 1 from right to left dispensing piston 1 output through connecting passages to outlet 1. Piston 1 shift directs flow against right side of piston 2. (See illustration 2)

Lubricant flow shifts piston 2 from right to left dispensing piston 2 output through valve ports of piston 1 and through outlet 2. Piston 2 shift directs lubricant flow against right side of piston 3. (See illustration 3)

Lubricant flow shifts piston 3 from right to left dispensing piston 3 output through valve ports of piston 2 and through outlet 3. Piston 3 shift directs lubricant through connecting passage to the left side of piston 1. (See illustration 4)

Lubricant flow against left side of piston begins the second half-cycle which shifts pistons from left to right dispensing lubricant through outlets 4, 5 and 6 of the divider valve.

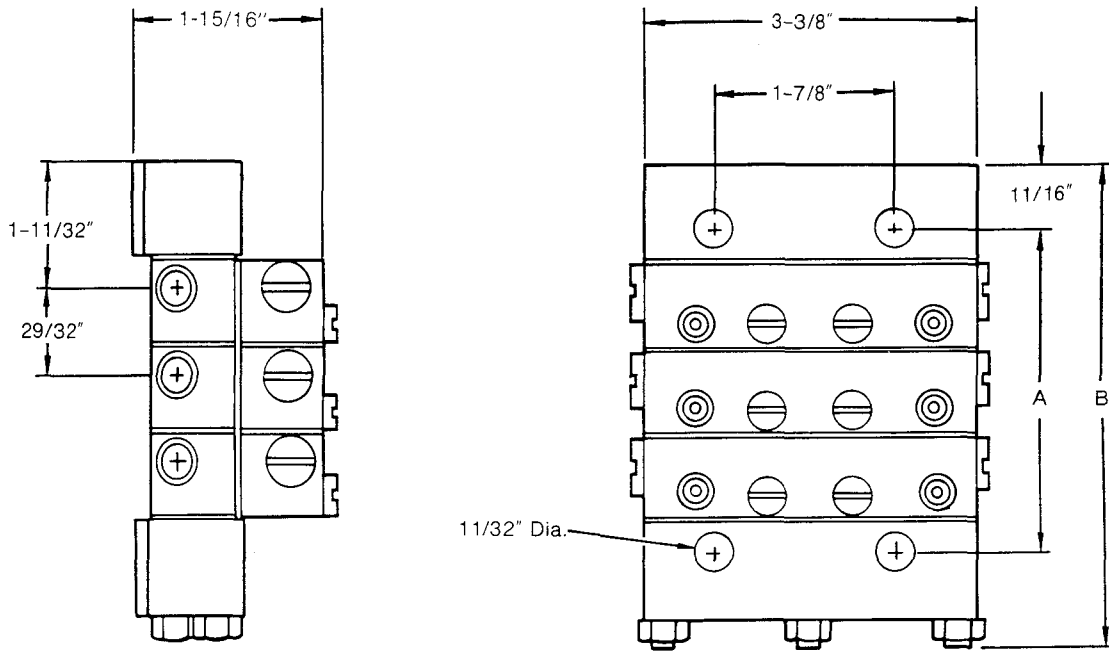




**SERVICE PARTS**

Part	Description	Part	Description	Part	Description
15117	Bearing	34600	O-Ring	236140	Gasket Plate
16479	Indicator Pin	50821	Screw	236145	Gasket Plate
16481	Indicator Body	56128	Spring	236147	Gasket Plate
16482	Retaining Plug	70449	Ball	236150	Gasket Plate
34579	O-Ring	236063	Plug	236554	Nut
34592	O-Ring	236064	Plug		

## DIMENSIONS



Baseplate	A	B
ML-3	$3-3/8"$	$5-3/32"$
ML-4	$4-9/32"$	$6"$
ML-5	$5-3/16"$	$6-29/32"$
ML-6	$6-3/32"$	$7-13/16"$
ML-7	$7"$	$8-23/32"$
ML-8	$7-29/32"$	$9-5/8"$

**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.