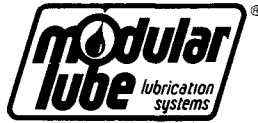


# MCLP PUMP

ROTARY DRIVE

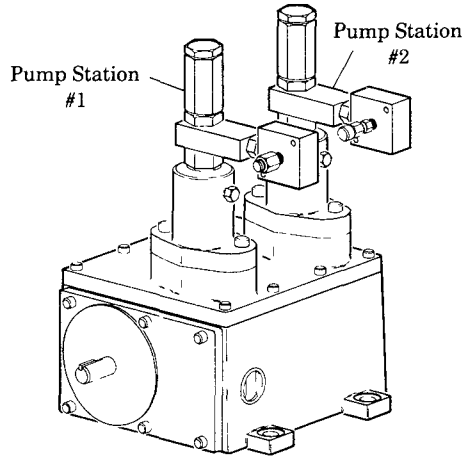


# Models 130200, 130204 & 130300 SERIES Series "D"

## DESCRIPTION

MCLP Pumps are plunger-type pumps, the plunger being actuated by a roller tappet assembly which is operated by the rotation of a cam.

Available with one or two adjustable pump heads, having either a 7mm or 11mm piston, and with single or double lobe cams. Dual head pumps can deliver a different oil from each pump head if required and the pump output can be regulated. An anchor cross, containing a purge port, rupture indicator, and outlet connection is supplied with each pump head.



## MODEL IDENTIFICATION

- 130200 Series - Left Hand End Rotary Drive.
- 130204 Series - Right Hand End Rotary Drive with Special Mounting Plate.
- 130300 Series - Right Hand End Rotary Drive.

### CODE LETTER IDENTIFICATION

The Drive Ratio for the MCLP Pumps will be specified by the first letter following the 130000 number:

† Ratios not available on Model 130204.

Code	A †	B †	C †	D	E	F	G	H
Ratio	1:1	2:1	2.78:1	4:1	5.6:1	7.7:1	8:1	11.1:1

Code	J	K	L †	M †	N †	P †	R †	S †
Ratio	15.5:1	21.5:1	1:2	1.2:7.8	1:4	1.5:6	1:7.7	1.8

The output pressure of the 7mm & 11mm MCLP Pump Head is limited with some of the above ratios. For a complete explanation, contact factory.

The second and third letters following the 130000 number represent Pump Stations #1 and #2 respectively:

CODE	CAM	*PUMP
A	15036 (single lobe)	130305 (w/7mm plunger)
B	16358 (double lobe)	130305 (w/7mm plunger)
C	15036 (single lobe)	130306 (w/11mm plunger)
D	16358 (double lobe)	130306 (w/11mm plunger)
**E	15036 (single lobe)	None
**F	16358 (double lobe)	None
***O	None	None

- \* Refer to Section M1, Page 10 Series for all pumps.
- \*\* Pump stations designated by E & F include pump mounting screws. Pump or pump cover not included.
- \*\*\* Pump stations designated by O; cam, pump and roller tappet assembly are replaced by spacer and pump station cover.

## INSTALLATION

Mount the MCLP Pump to a rigid support or frame adjacent to the engine drive shaft or electric motor shaft. Carefully align the pump to the drive shaft. Fill the gear box to the half-way mark of the sight glass with Conoco SAE 80W-90 gear oil or equivalent before running the pump. The pump unit and the lubrication system should be purged of any entrapped air to ensure reliable oil delivery.

## BLEEDING MCLP PUMP UNIT

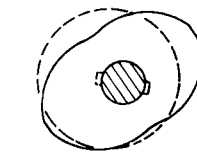
- 1) Connect filter primer to MCLP Pump inlet.
- 2) Loosen the pipe plug in the pump head and allow the oil to flow freely from the pipe plug until air bubbles no longer appear in the oil.
- 3) Set the MCLP Pump head to maximum output.
- 4) Loosen the outlet connection on the anchor cross and allow the pump to run until air bubbles no longer appear at the outlet. Tighten the outlet connection and turn off the pump.



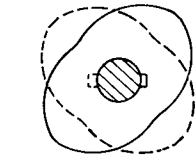
One Lincoln Way  
St. Louis, Missouri 63120-1578  
(314) 679-4200

SECTION - M20  
PAGE - 2D

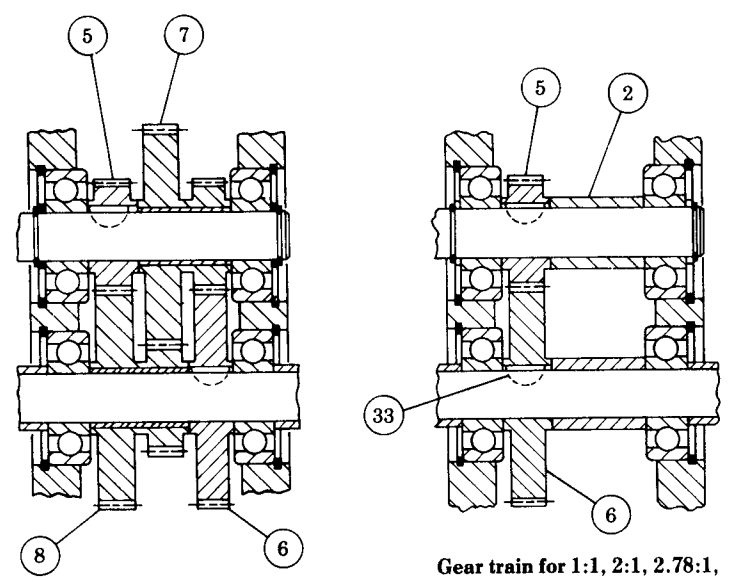
**CAM LOCATION**



When one single and one double lobe cam is required, cams should be offset as shown in the above view.

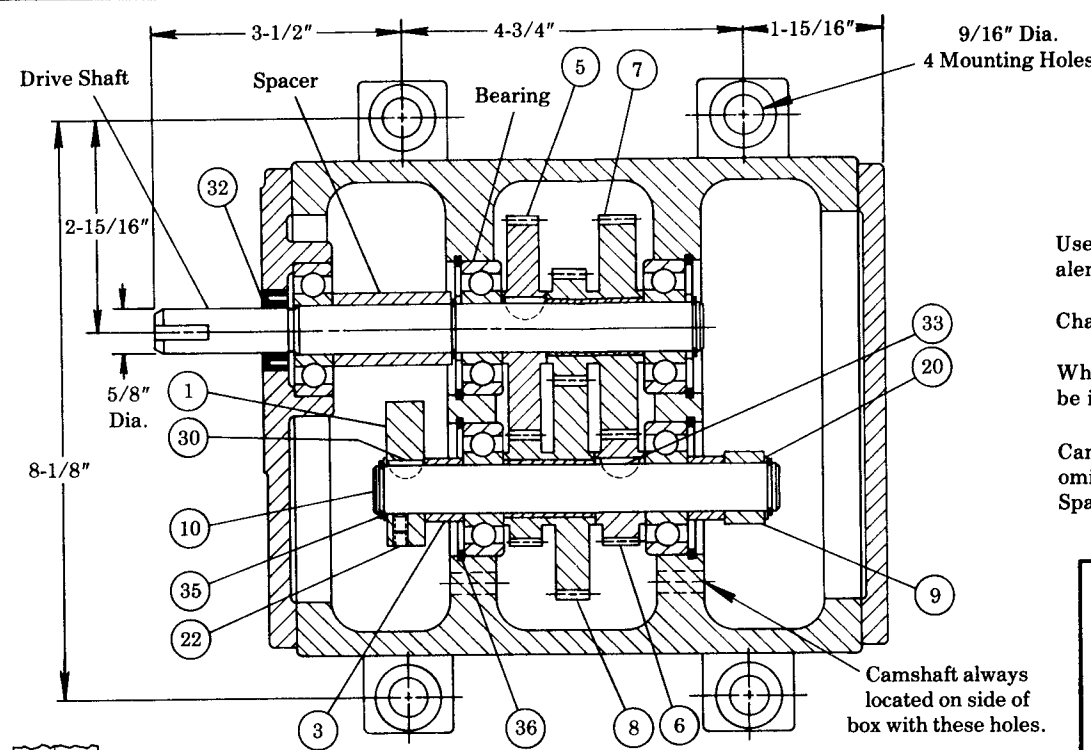


When two double lobe cams are required, cams should be offset at 90° as shown in the above view.



Gear location shown for reduction ratios.

Gear train for 1:1, 2:1, 2.78:1, 1:2 & 1:2.78 Drive Ratios only.



**NOTE:**

Use Conoco SAE 80W-90 gear oil or equivalent in gear housing.

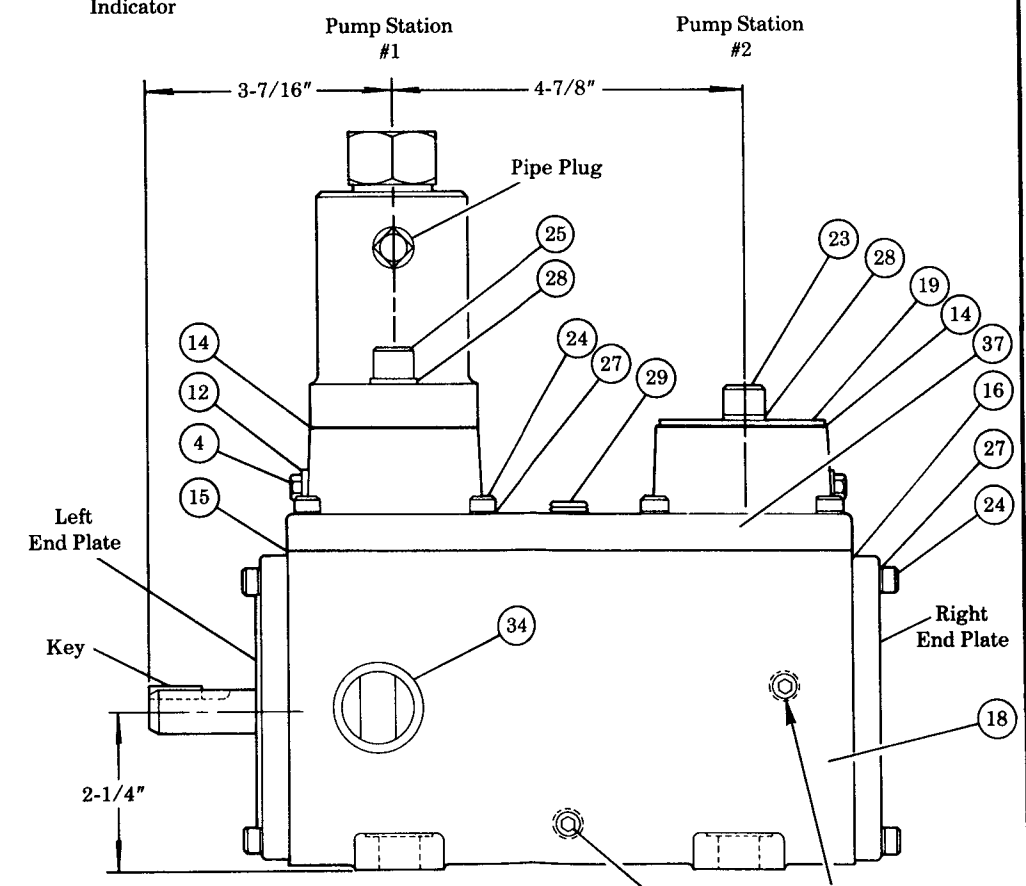
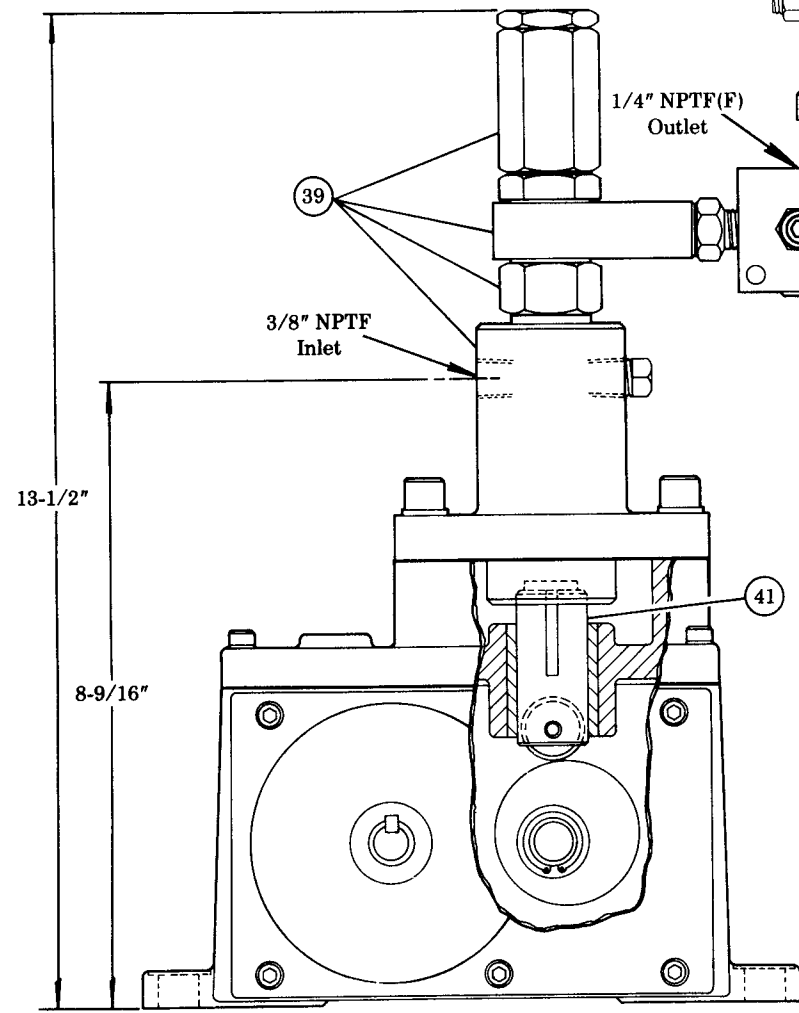
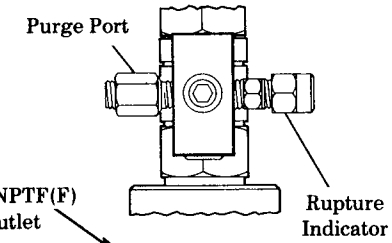
Change oil every 3 to 6 months.

When using two pumps, purge ports must be installed facing outside of gear housing.

Cam, set screw, key & roller tappet must be omitted when no cam is required. Use 15438 Spacer as shown.

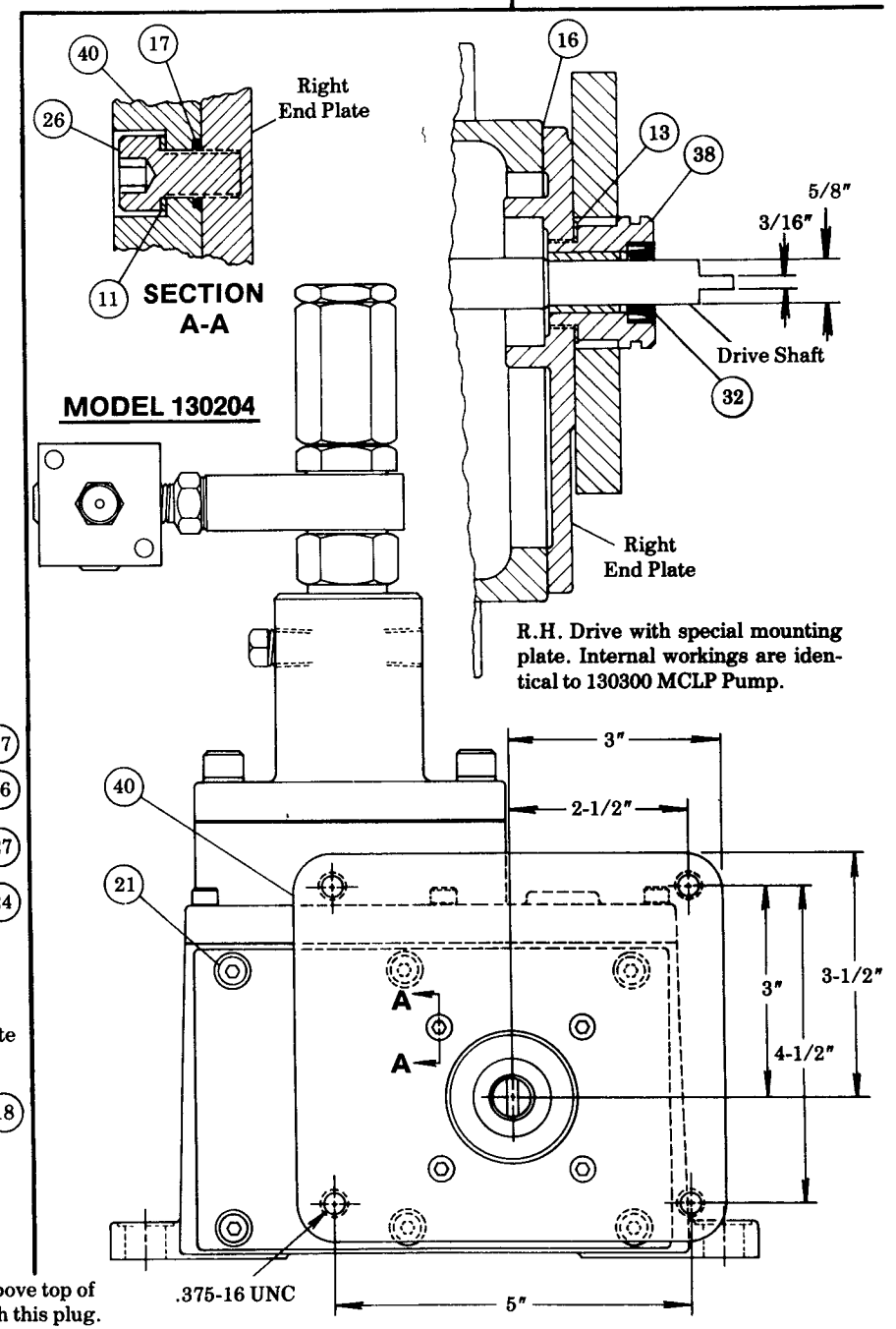
**MODEL: 130200 & 130300**

L.H. Drive shown. For R.H. Drive: drive shaft, oil seal, bearing and end plates must be changed accordingly. R.H. Drive gear train is reversed from L.H. Drive. Gear location shown for step-up ratios.



On one station unit, locate pump in pump station nearest drive.

Oil level should not rise above top of view gauge. Drain through this plug.



MODEL	DRIVE SHAFT		KEY		LEFT END PLATE	RIGHT END PLATE	16376 SPACER	69986 BEARING
	REDUCTION	SPEED-UP	REDUCTION	SPEED-UP				
130200	15373	15476	† 66652	†† 15474	40718	40719	1 req'd	5 req'd
130204	15447	—	—	—	40719	40705	—	4 req'd
130300	15373	15476	† 66652	†† 15474	40719	40718	1 req'd	5 req'd

† 3/16" Wide Key  
†† 1/8" Wide Key

### GEAR CHART

		Code			
		5	6	7	8
Ratio	1:1	15445	15445	—	—
	2:1	15475	15439	—	—
	2.78:1	15374	15390	—	—
	4:1	15445	15439	92875	92890
	5.6:1	15445	15439	92876	92880
	7.7:1	15445	15390	92862	92880
	8:1	15475	15439	92875	92875
	11.1:1	15374	15439	92875	92876
	15.5:1	15374	15439	92876	92862
	21.5:1	15374	15390	92862	92862
	1:2	15439	15475	—	—
	1:2.78	15390	15374	—	—
	1:4	15439	15445	92890	92875
	1:5.6	15439	15445	92880	92876
	1:7.7	15390	15445	92880	92862
	1:8	15439	15475	92875	92875

### SERVICE PARTS

CODE	PART	QUAN.	DESCRIPTION	CODE	PART	QUAN.	DESCRIPTION
1	*	As req'd	Cam	22	50522	As req'd	Set screw
2	15367	As req'd	Spacer	23	50792	As req'd	Screw
3	15368	2	Spacer	24	50833	As req'd	Screw
4	15369	2	Tappet alignment screw	25	50849	As req'd	Screw
5	**	1	Spur gear - plain	26	50860	4	Screw
6	**	1	Spur gear - plain	27	66186	As req'd	Lockwasher
7	**	1	Spur gear - cluster	28	66220	4	Lockwasher
8	**	1	Spur gear - cluster	29	67359	1	Pipe plug
9	15438	As req'd	Spacer	30	68220	As req'd	#3 Woodruff key
10	16357	1	Camshaft	31	68645	4	Pipe plug
11	31162	4	Gasket	32	69853	1	Oil seal
12	31163	2	Gasket	33	69973-1	2	#5 Woodruff key
13	31176	1	Washer	34	69985	2	View gauge
14	33131	2	Pump gasket	35	69987	4	Retainer ring
15	33132	1	Top cover gasket	36	69988	4	Retainer ring
16	33133	2	End plate gasket	37	92863	1	Gear case cover assembly
17	34368	4	O-ring	38	92882	1	Stuffing box
18	40721	1	Gear case housing	39	***	As req'd	Pump head assembly
19	45989	As req'd	Pump station cover	40	360718	1	Mounting plate
20	48564	4	Washer	41	880124	As req'd	Roller tappet assembly
21	50521	6	Screw				

\* 15036 Single Lobe Cam or 16358 Double Lobe Cam as designated.  
\*\* See Gear Chart above.  
\*\*\* 7mm pump or 11mm pump as required. See Code Chart on front page.

**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.