

Dipstick Selections & Oil Pan Usage

An automotive type dipstick is standard for all UltraMax gear drives. To minimize oil churning from the high speed gear, oil pans are used on some double reduction drives as indicated in the following tables.

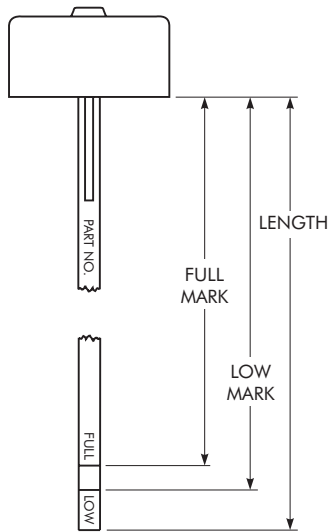
Drives are equipped with proper dipstick and oil pan, as determined at time of original order. When the original input speed is changed, use the dipstick as specified in Tables 2 through 6 from the new conditions. When the ratio is changed, add an oil pan when required. If the drive was originally furnished with an oil pan it is not necessary to remove it, just use the proper dipstick indicated to provide the correct oil level for the new conditions.

Drive Sizes 2040 & 2050F2 may require a dipstick tube or vent tube to prevent oil leakage from occurring through the standard dipstick plug. When the input speed exceeds the values indicated in Tables 3 or 4, dipstick tube P/N-2121071 will replace the standard dipstick plug P/N-1155598. When a motor mount is used in the 12 o'clock position, a vent tube, P/N-2121072 is used in place of the dipstick tube at the higher speeds.

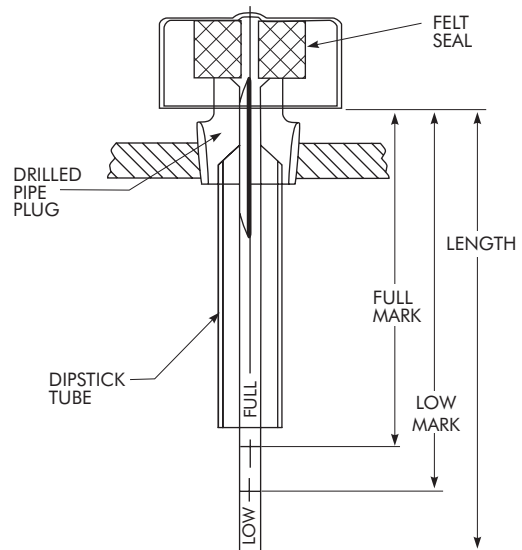
The data listed is valid for standard gear drives operated within Selection Guide input speeds (refer to Factory if running at higher speeds).

TABLE 1 — Dipstick Dimensions

Part No.	INCHES			MILLIMETERS		
	Full Mark	Low Mark	Length	Full Mark	Low Mark	Length
277886	9.20	9.45	10.20	233.7	240.0	259.1
277887	10.70	10.95	11.70	271.8	278.1	297.2
277888	12.38	12.63	13.38	314.5	320.8	339.9
277889	14.68	14.93	15.68	372.9	379.2	398.3
277893	11.77	12.02	12.77	299.0	305.3	324.4
1200289	4.22	4.42	5.18	107.2	112.3	131.6
1200290	4.76	4.96	5.72	120.9	126.0	145.3
1200291	5.42	5.62	6.38	137.7	142.7	162.1
1200292	5.92	6.12	6.88	150.4	155.4	174.8
1200293	9.60	9.80	10.56	243.8	248.9	268.2
1200295	13.20	13.40	14.16	335.3	340.4	359.7
1200296	16.36	16.56	17.32	415.5	420.6	439.9
1200297	17.78	17.98	18.74	451.6	456.7	476.0
1200298	8.06	8.26	9.02	204.7	209.8	229.1
1200299	10.30	10.50	11.26	261.6	266.7	286.0
1200300	6.22	6.42	7.18	158.0	163.1	182.4
1200301	7.06	7.26	8.02	179.3	184.4	203.7
1200302	8.50	8.70	9.46	215.9	221.0	240.3
1200303	11.40	11.60	12.36	289.6	294.6	313.9
1200304	14.26	14.46	15.22	362.2	367.3	386.6
1218204	13.40	13.60	14.36	340.4	345.4	364.7
1236730	7.46	7.66	8.42	189.5	194.6	213.9



Standard Dipstick



Dipstick with Tube

TABLE 2 — Dipstick Part Numbers & Oil Pan Usage by Input Speed (rpm) Ratios 1.5:1 through 4.57:1

DRIVE SIZE	Dipstick Part No.	Nominal Ratio										
		1.50	1.84	2.03	2.25	2.49	2.76	3.05	3.38	3.74	4.13	4.57
1020	1200289	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds
1030	1200290	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds
2040	1200290	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds
2050	1200292	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds
2060	1200302	750 & Above	825 & Above	825 & Above	940 & Above	940 & Above	1075 & Above	1075 & Above	1215 & Above	1215 & Above	1395 & Above	1395 & Above
	1200300	Below 750	Below 825	Below 825	Below 940	Below 940	Below 1075	Below 1075	Below 1215	Below 1215	Below 1395	Below 1395
2070	1200293	675 & Above	745 & Above	745 & Above	840 & Above	840 & Above	955 & Above	955 & Above	1080 & Above	1080 & Above	1250 & Above	1250 & Above
	1200301	Below 675	Below 745	Below 745	Below 840	Below 840	Below 955	Below 955	Below 1080	Below 1080	Below 1250	Below 1250
2080	277887	625 & Above	690 & Above	690 & Above	775 & Above	775 & Above	875 & Above	875 & Above	970 & Above	970 & Above	1135 & Above	1135 & Above
	1200298	Below 625	Below 690	Below 690	Below 775	Below 775	Below 875	Below 875	Below 970	Below 970	Below 1135	Below 1135
2090	277888	550 & Above	610 & Above	550 & Above	700 & Above	610 & Above	800 & Above	700 & Above	935 & Above	800 & Above	1085 & Above	935 & Above
	1200293	Below 550	Below 610	Below 550	Below 700	Below 610	Below 800	Below 700	Below 935	Below 800	Below 1085	Below 935

Shaded areas indicate oil pan is required.

TABLE 3 — Dipstick Tube Part Number & Usage by Input Speed (rpm) Ratios 1.5:1 thru 4.57:1

DRIVE SIZE	Dipstick Tube ★	Nominal Ratio										
		Dipstick Plug	1.50	1.84	2.03	2.25	2.49	2.76	3.05	3.38	3.74	4.13
2040	2121071 ★	1090 & Above	1355 & Above	1475 & Above	1630 & Above	1775 & Above	2030 & Above	2200 & Above	2445 & Above	2655 & Above	3070 & Above	3335 & Above
	1155598	Below 1090	Below 1355	Below 1475	Below 1630	Below 1775	Below 2030	Below 2200	Below 2445	Below 2655	Below 3070	Below 3335
2050	2121071 ★	940 & Above	1160 & Above	1145 & Above	1435 & Above	1415 & Above	1720 & Above	1745 & Above	2090 & Above	2100 & Above	2550 & Above	2550 & Above
	1155598	Below 940	Below 1160	Below 1145	Below 1435	Below 1415	Below 1720	Below 1745	Below 2090	Below 2100	Below 2550	Below 2550

★ When motor mount is used in the 12 o'clock position, vent tube (P/N 2121072) is furnished in place of dipstick tube.

Table 4 — Dipstick Tube Part Number & Usage by Input Speed (rpm) Ratios 5.06:1 thru 31.9:1

DRIVE SIZE	Dipstick Tube★	Nominal Ratio									
		Dipstick Plug	5.06	6.20	7.59	9.30	11.39	13.95	17.09	20.93	25.63
2040	2121071 ★	1765 & Above	2195 & Above	2640 & Above	3285 & Above						
	1155598	Below 1765	Below 2195	Below 2640	Below 3285	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds
2050	2121071 ★	1530 & Above	1890 & Above	2335 & Above	2800 & Above	3405 & Above					
	1155598	Below 1530	Below 1890	Below 2335	Below 2800	Below 3405	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds

★ When motor mount is used in the 12 o'clock position, vent tube (P/N 2121072) is furnished in place of dipstick tube.



TABLE 5 — Dipstick Part Numbers & Oil Pan Usage by Input Speed (rpm) Ratios 5.06:1 through 31.39:1

DRIVE SIZE	Dipstick Part No.	Nominal Ratio									
		5.06	6.20	7.59	9.30	11.39	13.95	17.09	20.93	25.63	31.39
1020	1200289	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds
1030	1200290	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds
2040	1200290	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds
2050	1200292	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds	All Speeds
2060	1200302	825 & Above	940 & Above	1075 & Above	1215 & Above	1395 & Above	1620 & Above	1940 & Above	2300 & Above		
	1200300	Below 825	Below 940	Below 1075	Below 1215	Below 1395	Below 1620	Below 1940	Below 2300	All Speeds	All Speeds
2070	1200293	740 & Above	840 & Above	950 & Above	1070 & Above	1250 & Above	1450 & Above	1770 & Above	2030 & Above		
	1200301	Below 740	Below 840	Below 950	Below 1070	Below 1250	Below 1450	Below 1770	Below 2030	All Speeds	All Speeds
2080	277887	690 & Above	775 & Above	875 & Above	955 & Above	1135 & Above	1325 & Above	1600 & Above	1870 & Above	2185 & Above	
	1200298	Below 690	Below 775	Below 875	Below 955	Below 1135	Below 1325	Below 1600	Below 1870	Below 2185	All Speeds
2090	277888	550 & Above	610 & Above	700 & Above	800 & Above	935 & Above	1085 & Above	1255 & Above	1510 & Above	1790 & Above	
	1200293	Below 550	Below 610	Below 700	Below 800	Below 935	Below 1085	Below 1255	Below 1510	Below 1790	All Speeds
2100	1218204	505 & Above	580 & Above	645 & Above	735 & Above	865 & Above	1000 & Above	1180 & Above	1415 & Above	1635 & Above	
	1200299	Below 505	Below 580	Below 645	Below 735	Below 865	Below 1000	Below 1180	Below 1415	Below 1635	All Speeds
2110	277889	445 & Above	500 & Above	575 & Above	670 & Above	770 & Above	890 & Above	1045 & Above	1230 & Above	1455 & Above	1745 & Above
	277893	Below 445	Below 500	Below 575	Below 670	Below 770	Below 890	Below 1045	Below 1230	Below 1455	Below 1745
2120	1200296	400 & Above	450 & Above	510 & Above	580 & Above	675 & Above	785 & Above	930 & Above	1090 & Above	1300 & Above	1560 & Above
	1200295	Below 400	Below 450	Below 510	Below 580	Below 675	Below 785	Below 930	Below 1090	Below 1300	Below 1560
2130	1200297	350 & Above	395 & Above	450 & Above	505 & Above	610 & Above	705 & Above	810 & Above	965 & Above	1125 & Above	1340 & Above
	1200304	Below 350	Below 395	Below 450	Below 505	Below 610	Below 705	Below 810	Below 965	Below 1125	Below 1340

Shaded areas indicate oil pan is required.

TABLE 6 — Dipstick Part Numbers Ratios 38.44:1 through 985:1

DRIVE SIZE	Triple Reduction	Quadruple Reduction
1020	1200289	1200289
1030	1200290	1200290
2040	1200290	1200290
2050	1200292	1200292
2060	1200291	1200291
2070	1200300	1200291
2080	1200300	1200300
2090	1236730	1236730
2100	277886	277886
2110	1200299	1200299
2120	277893	277893
2130	1200303	1200303