



## Class Reference Manual – Section 6

### Cylinder Stud Assembly Class Number Differentiations for Lycoming Series Cylinders

Revision 15, October 20, 2004

Replaces: March 31, 2004

Cylinder Class	Barrel Flange Width & Spotface	Cylinder Head Family	Spark Plug Boss Reach	Exh. Stud Thread Type	Barrel Length (Inches)	Bore Size (Inches)	Intake Seat Differences		Piston P/N	Obscure Differences
							Venturi or Small Diameter	Large Diameter		
01.0	NS	235	Short	Coarse	6.500	4.375			73851	Corner Flange Holes 3/8"
01.1	NS	235	Short	Coarse	6.500	4.375			LW18725	Corner Flange Holes 7/16"
01.2	NS	235	Short	Coarse	6.500	4.375			LW18729	01.1 vs. 01.2 Different Piston
01.3	NS	235	Short	Coarse	6.500	4.375			LW18729	Lead Relief Pockets in Head
02.0	NS	290	Short	Coarse	6.500	4.875			69958	Intake Seat P/N 66528
03.0	NS	290	Short	Coarse	6.500	4.875			69841	Intake Seat P/N 72057
03.1	NS	290	Short	Coarse	6.500	4.875			70396	03.0 vs. 03.1 Different Piston
04.0	WD	Parallel	Short	Coarse	6.500	5.125			AEL75413	04.0 vs. 04.1 Different Piston
04.1	WD	Parallel	Short	Coarse	6.500	5.125			AEL75089	04.0 vs. 04.1 Different Piston
05.0	WD	Parallel	Long	Coarse	6.500	5.125			AEL75089	
06.0	NS	Parallel	Short	Coarse	6.500	5.125			AEL75413	Spot Faced Barrel Flange
07.0	ND	Parallel	Short	Coarse	6.500	5.125			AEL75089	Has Injector Boss
08.0	ND	Parallel	Short	Coarse	6.500	5.125			AEL75089	Has no injector boss; Class 07.0 may be substituted if 1/8 pipe plug is installed
08.0A	ND	Parallel	Short	Coarse	6.500	5.125			AEL75413	
09.0A	ND	Par. 340	Short	Coarse	6.625	5.125			AEL75089	Parallel Head may be substituted
09.0B	ND	Par. 340	Short	Coarse	6.625	5.125			AEL75413	Parallel Head may be substituted
10.0	ND	Parallel	Short	Coarse	7.000	5.125			AEL75413	10.0 vs. 10.1 Different Piston
10.1	ND	Parallel	Short	Coarse	7.000	5.125			AEL75089	10.0 vs. 10.1 Different Piston
11.0	ND	Angle	Short	Coarse	7.000	5.125	X		AEL10207	
11.1	ND	Angle	Short	Coarse	7.000	5.125		X	AEL10207	
12.0	WD	Parallel	Short	Coarse	7.000	5.125			AEL75089	12.0 vs. 12.2 Different Piston
12.2	WD	Parallel	Short	Coarse	7.000	5.125			AEL75413	12.0 vs. 12.2 Different Piston
13.0	WD	Angle	Short	Coarse	7.000	5.125	X		AEL10207	
13.2	WD	Angle	Short	Coarse	7.000	5.125		X	AEL10207	
13.3	WD	Angle	Short	Coarse	7.000	5.125		X	LW11487	13.2 vs. 13.3 Different Piston
14.0	WD	Angle	Long	Coarse	7.000	5.125	X		AEL10207	14.0 vs. 14.2 vs. 14.3 Piston
14.2	WD	Angle	Long	Coarse	7.000	5.125	X		LW13358	14.0 vs. 14.2 vs. 14.3 Piston
14.3	WD	Angle	Long	Coarse	7.000	5.125	X		LW14610	14.0 vs. 14.2 vs. 14.3 Piston
14.3A	WD	Angle	Long	Coarse	7.000	5.125	X		AEL10545	14.0 vs. 14.2 vs. 14.3 Piston
14.4	WD	Angle	Long	Coarse	7.000	5.125		X	AEL10545	14.4 vs. 14.5 Piston



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14.5	WD	Angle	Long	Coarse	7.000	5.125		X	AEL10207	14.4 vs. 14.5 Piston
15.0	ND	Par. IVO	Short	Coarse	7.000	5.125			AEL75089	Has Injector Boss
15.1	WD	Par. IVO	Long	Coarse	7.000	5.125			AEL75089	Has Injector Boss
16.0	ND	Par. IVO	Short	Coarse	7.000	5.125			AEL75089	
17.0	NS	Angle VO	Short	Fine	6.500	4.875			75984	
18.0	NS	Angle VO	Short	Fine	6.500	4.875			75984	18.0 has thin cooling fins vs. 17.0
19.0	NS	Angle VO	Long	Fine	6.500	4.875			75984	
19.0A	NS	Angle VO	Long	Fine	6.500	4.875			76172	
21.0	NS	Angle	Short	Fine	6.500	5.125			AEL10208	
22.0	ND	Angle	Short	Fine	6.500	5.125			AEL10207	22.0 vs. 22.1 Different Piston
22.1	ND	Angle	Short	Fine	6.500	5.125			AEL10208	22.0 vs. 22.1 Different Piston
23.0	ND	Angle	Long	Fine	6.500	5.125			AEL10207	23.0 vs. 23.1 Different Piston
23.1	ND	Angle	Long	Fine	6.500	5.125			AEL10208	23.0 vs. 23.1 Different Piston
24.0	ND	Updraft	Short	Coarse	7.000	5.125	X		AEL10207	
25.0	ND	Angle	Long	Coarse	7.000	5.125	X		AEL10207	
25.1	ND	Angle	Long	Coarse	7.000	5.125		X	AEL10207	
26.0	ND	Parallel	Long	Coarse	7.000	5.125			AEL75089	26.0 vs. 26.1 Different Piston
26.1	ND	Parallel	Long	Coarse	7.000	5.125			AEL75413	26.0 vs. 26.1 Different Piston
27.0	ND	Updraft	Long	Coarse	7.000	5.125	X		AEL10545	27.0 vs. 27.1 Different Piston
27.1	ND	Updraft	Long	Coarse	7.000	5.125	X		AEL10207	27.0 vs. 27.1 Different Piston
27.2	ND	Updraft	Long	Coarse	7.000	5.125		X	AEL10207	
28.0	WDX	Updraft	Long	Coarse	7.000	5.125	X		AEL10545	
29.0	WDX	541	Long	Coarse	7.000	5.125	X		AEL10545	
30.0	ND	Angle	Short	Fine	7.000	5.125		X	AEL10207	
31.0	ND	Angle	Long	Fine	7.000	5.125	X		AEL10208	
31.1	ND	Angle	Long	Fine	7.000	5.125		X	AEL10207	
32.0	ND	Updraft	Short	Fine	7.000	5.125		X	AEL10207	
32.1	ND	Updraft	Short	Fine	7.000	5.125			AEL10208	
33.0	ND	Updraft	Long	Fine	7.000	5.125	X		AEL10208	
33.1	ND	Updraft	Long	Fine	7.000	5.125		X	AEL10207	
35.0	NX	Angle	Short	Fine	7.000	5.125		X	AEL10208	35.0 vs. 35.1 Different Piston
35.1	NX	Angle	Short	Fine	7.000	5.125		X	AEL10207	35.0 vs. 35.1 Different Piston
36.0	NX	Angle	Long	Fine	7.000	5.125		X	AEL10208	36.0 vs. 36.1 Different Piston
36.1	NX	Angle	Long	Fine	7.000	5.125		X	AEL10207	36.0 vs. 36.1 Different Piston
38.0	WD	Parallel	Long	Coarse	7.000	5.125			AEL75413	38.0, 38.1, 38.3 vary by piston only



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38.1	WD	Parallel	Long	Coarse	7.000	5.125			LW12733	38.0, 38.1, 38.3 vary by piston only
38.2	WD	Parallel	Long	Coarse	7.000	5.125			LW12733	Oil Cooled Guide, See S.I. 1479
38.3	WD	Parallel	Long	Coarse	7.000	5.125			AEL75089	38.0, 38.1, 38.3 vary by piston only
39.0	NS	290	Short	Coarse	6.500	4.875			69958	
39.0A	NS	290	Short	Coarse	6.500	4.875			66861	
40.0	WD	Updraft	Long	Coarse	7.000	5.125	X		AEL10545	40.0 vs. 40.1 Different Piston
40.1	WD	Updraft	Long	Coarse	7.000	5.125	X		AEL10207	40.0 vs. 40.1 Different Piston
41.0	WD	Par. H	Short	Coarse	6.500	5.125			AEL15357	
42.0	WD	Par. H	Short	Coarse	7.000	5.125			AEL15357	
43.0	TWD	Parallel	Short	Coarse	7.000	5.125			LW13396	
43.1	TWD	Parallel	Short	Coarse	7.000	5.125			AEL75089	
44.0	TWD	Parallel	Long	Coarse	7.000	5.125			AEL75089	
46.0	WD	Off Set	Long	Coarse	7.000	5.125	X		AEL10545	
47.0	WD	O/S Down	Long	Coarse	7.000	5.125	X		AEL10545	47.0A vs. 47.0B Different Piston
48.0	WD	Par. H	Long	Coarse	7.000	5.125			LW12733	

#### Barrel Flange Codes

- ND = Narrow Deck (.255" Thick)
- NS = Narrow Deck with Spot Faced Flange Holes
- NX = Narrow Deck with 20 Barrel Cooling Fins vs. Normal 18
- WD = Wide Deck (.410" Thick — Bolt Hole Pattern Different From Narrow Deck Flanged Barrels
- TWD = Thin-Wide Deck (Same Bolt Pattern as Wide Deck, But Only .355" Thick)
- WDX = Wide Deck with 17 Cooling Fins vs. Normal 18 — 541 Barrel

#### Spark Plug Boss Descriptions

- Long = Helical Coil has 9 threads
- Short = Helical Coil has 5 threads