

Numbering of Amal Needles

From: Thomas Los <totallos@e...>
Date: Sat Jan 19, 2002 3:39 pm
Subject: Re: [AJS&M] needle numbers

Here's a question about needles: are they numbered? I mean, I know they come in different numbers, but are they labeled somehow? If so, my eyes can no longer pick it out. Hate to be buying new needles "just in case". Fortunately, everything seems to be working at the moment.

From: "The Doctor" <ra.casey@a...>
Date: Sun Jan 20, 2002 3:23 am
Subject: Re: [AJS&M] needle numbers

Tom, assuming your question was directed to AMAL needles, yes. They are "marked" with a series of rings machined into the top end of the needle.

Dick

From: Wheel Power <wheelpower@p...>
Date: Sat Jan 19, 2002 7:41 pm
Subject: Re: [AJS&M] needle numbers - reply

Assuming we are talking about the needle and needle jet here, the needles are not marked with the series of rings machined into the top. Those rings are there for fine adjusting of the needle position - to richen or lean out the mixture when fine tuning by raising or lowering it in relation to the opening supplying the fuel. The rings hold the clip that positions the needle at the top of the slide. Needles are stamped with a letter designation like "C" or "D" at the top and this tells you what carburetor it is intended to be used in. At least as far as Amal goes.

Best regards,

=MM=

From: "Geo A Corner" <george@g...>
Date: Sat Jan 19, 2002 5:08 pm
Subject: Re: [AJS&M] needle numbers

I have never been able to find any identifying mark on them. In fact I was warned to measure the length of a needle to identify it. I think this was TT needle which was an odd length - this seemed to indicate that the only way to identify them was to measure.

Geo

From: Thomas Los <totallos@e...>
Date: Sun Jan 20, 2002 1:06 am
Subject: Re: [AJS&M] needle numbers

You're not talking about the grooves for adjusting the needle position, I assume? Most seem to have 5.
Tom

From: Pete the Cheap <peterlgay@h...>
Date: Sun Jan 20, 2002 2:52 am
Subject: Re: [AJS&M] needle numbers

I was told once that all needles for 389 Monoblocs are stamped "D". All of mine are.

PtC.

From: Jordan <jordan@z...>
Date: Sun Jan 20, 2002 6:12 am
Subject: Re: [AJS&M] needle numbers

Just in case anyone's interested, I measured up some Amal needles I have. Had to find something to measure with my new digital "vernier" calipers!

NB: This is not authoritative, just what I got when I measured them. But, they should give an idea of sizes and tapers involved. The method of measuring at regular intervals down the needles follows SU practice.

AMAL Concentric Mk 1 needle tapers

Characteristics : 3 grooves
1.5mm groove spacings
Nominal diameter = 2.5mm

Test conditions: Measurements taken from bottom edge of 2nd (middle) groove, in 1.5mm increments.
All dimensions in millimeters

Distance	2 ring*	3 ring	4 ring	U.1*
-----	-----	-----	-----	---
21.0				
22.5				
24.0				
25.5	2.49			
27.0	2.48			
28.5	2.48			
30.0	2.45			
31.5	2.42			
33.0	2.36			
34.5	2.32	2.49		
36.0	2.27	2.48		
37.5	2.50	2.22	2.48	
39.0	2.49	2.18	2.48	2.50
40.5	2.47	2.12	2.48	2.47
42.0	2.41	2.07	2.44	2.43
43.5	2.35	2.03	2.41	2.39
45.0	2.30	1.98	2.37	2.35
46.5	2.26	1.93	2.33	2.29
48.0	2.22	1.88	2.29	2.25
49.5	2.16	1.84	2.25	2.18
51.0	2.12	1.80	2.21	2.13
52.5	2.06	1.75	2.17	2.08
54.0	2.02	1.70	2.14	2.03
55.5	1.95	1.66	2.11	1.97
57.0	1.90	2.07	1.91	
58.5	1.86	2.05	1.87	
60.0	1.81	2.01	1.82	
61.5	1.98			
63.0	1.95			
64.5				

* U1 = 2 ring (according to pa.norton@f...)

AMAL Concentric Mk 2 needle tapers

Characteristics: 3 grooves
1 mm groove spacings
Nominal diameter = 2.5mm

Test conditions: Measurements taken from bottom edge of 2nd (middle) groove, in 1mm increments.
All dimensions in millimeters

Distance	2C3
-----	---
40	2.48
41	2.48
42	2.47
43	2.46
44	2.43
45	2.41
46	2.40
47	2.37
48	2.34
49	2.33
50	2.30
51	2.28
52	2.26
53	2.24
54	2.21
55	2.19
56	2.17
57	2.15
58	2.11
59	2.08
60	2.06
61	2.04
62	2.01
63	1.97
64	1.93
65	1.92

AMAL Monobloc needle tapers

Characteristics: 5 grooves
0.0625 inch (1/16") groove spacings
Nominal diameter = 0.098 inch

Test conditions: Measurements taken from bottom edge of 3rd (middle)
groove, in 1/16 inch increments.
All dimensions in inches

Distance	C	D	DA
-----	-	-	--
2.125	0.0980		
2.1875	0.0975		
2.25	0.0960		
2.3125	0.0930		
2.375	0.0980	0.0915	
2.4375	0.0980	0.0885	
2.5	0.0980	0.0865	
2.5625	0.0975	0.0840	
2.625	0.0950	0.0980	0.0820
2.6875	0.0920	0.0980	0.0795
2.75	0.0895	0.0980	0.0770
2.8125	0.0865	0.0965	0.0745
2.875	0.0840	0.0945	0.0725
2.9375	0.0815	0.0920	0.0705
3 0.0790	0.0900	0.0685	
3.0625	0.0760	0.0880	0.0660
3.125	0.0725	0.0860	0.0640
3.1875	0.0700	0.0840	
3.25	0.0670	0.0815	
3.3125	0.0650	0.0795	
3.375	0.0615	0.0775	
3.4375	0.0580	0.0750	
3.5	0.0735		
3.5625	0.0715		
3.625	0.0695		
3.6875	0.0675		
3.75	0.0655		
3.8125	0.0640		

AMAL Pre-Monobloc needle tapers

Characteristics: as for Monobloc

Test conditions: as for Monobloc

Distance	Type 6	Type 29
1.75	0.0980	
1.8125	0.0975	
1.875	0.0960	0.0980
1.9375	0.0945	0.0970
2	0.0930	0.0955
2.0625	0.0915	0.0940
2.125	0.0900	0.0925
2.1875	0.0885	0.0910
2.25	0.0865	0.0890
2.3125	0.0845	0.0875
2.375	0.0830	0.0860
2.4375	0.0815	0.0845
2.5	0.0795	0.0825
2.5625	0.0780	0.0805
2.625	0.0760	0.0785
2.6875	0.0735	0.0765
2.75	0.0715	0.0745
2.8125	0.0700	0.0725
2.875	0.0675	0.0710
2.9375	0.0660	0.0690
3	0.0670	
3.0625	0.0650	
3.125	0.0630	