

Propellant Grain Cross-Reference Guide

Updated: 11/2/23

NOTE: Add 5% to tube length for build-up entry**White Lightning Grains (8225W)**

Part no.	Tube P/N	O.D.	I.D.	Length	Core	Net wt.	Casting Wt.	Notes
18WLPG-1	03154L	0.562"	0.534"	4.5"	No	30g	31.5G	
29WLPG-1	03164L	0.933"	0.901"	14.00"	No	266g	279.3	
38WLPG-1	03170L	1.308"	1.274"	10.50"	No	419g	440.0g	
54WLPG-1	03178L	1.875"	1.800"	16.25"	No	1,230.0	1,291.5	
03616	03180L	2.557"	2.493"	5.19"	0.875" center	662g	793.0g	
03622	03180L	2.557"	2.493"	5.19"	0.875" moon	662g	793.0g	
03618	03182L	3.365"	3.270"	6.00"	1.125" center	1,325g	1612.5g	
03623	03182L	3.365"	3.270"	6.00"	1.125" moon	1,325g	1612.5g	

Blue Thunder Grains (8121TC)

Part no.	Tube P/N	O.D.	I.D.	Length	Core	Net wt.	Casting Wt.	Notes
18BTPG-1	03154L	0.562"	0.534"	10.5"	No	62.5g	65.6g	
18BTPG-2	03154L	0.562"	0.534"	5.0"	No	30g	31.5g	
29BTPG-1	03164L	0.933"	0.901"	14.0"	No	238g	249.9g	
29BTPG-2	03168-CAP	1.000"	0.975"	12.5"	No	249g	261.5g	
38BTPG-1	03170L	1.308"	1.274"	10.5"	No	356g	373.8g	
54BTPG-1	03178L	1.875"	1.800"	16.25"	No	1,090.0	1,144.5	
03616-2	03180L	2.557"	2.493"	5.19"	0.875" center	591g	689.0g	
03618-2	03182L	3.365"	3.270"	6.00"	1.125" center	1,183g	1409.0g	

Black Jack Grains (8023D)

Part no.	Tube P/N	O.D.	I.D.	Length	Core	Net wt.	Casting Wt.	Notes
29BJPG-1	03164L	0.933"	0.901"	14.0"	No	305g	320.3g	
38BJPG-1	03172L	1.308"	1.213"	10.5"	No	415g	435.8g	

Redline Grains (8125RC)

Part no.	Tube P/N	O.D.	I.D.	Length	Core	Net wt.	Casting Wt.	Notes
24RPG-1	03159L	0.732"	0.710"	14.25"	No	160g	168.0g	
29RPG-1	03164L	0.933"	0.901"	14.0"	No	253g	265.7g	
38RPG-1	03170L	1.308"	1.274"	10.5"	No	379g	398.0g	
54RPG-1	03178L	1.875"	1.800"	16.25"	No	1,167.0	1,225.4	
03616-1	03180L	2.557"	2.493"	5.19"	0.875" center	629g	753.0g	
03618-5	03182L	3.365"	3.270"	6.00"	1.125" center	1,259g	1525.0g	
03618-6	03182L	3.365"	3.270"	6.00"	1.250" center	1,222g	1538.0g	8125RCC (N3300R version)

Black Max Grains (8124FJNF)

Part no.	Tube P/N	O.D.	I.D.	Length	Core	Net wt.	Casting Wt.	Notes
38FJPG-1	03172L	1.308"	1.213"	10.50"	No	402g	422.1g	Needs data sheet
54FJPG-1	03178L	1.875"	1.800"	9.50"	No	801g	841.1g	Needs data sheet

Warp-9 Grains (8223AL)

Part no.	Tube P/N	O.D.	I.D.	Length	Core	Net wt.	Casting Wt.	Notes
38W9PG-1	03170L	1.308"	1.274"	10.5"	No	378g	396.9g	
03N38-2	03169-PETG	1.247"	1.211"	12.429"	0.625 dia x 0.500" deep	380.5	401.1g	Plastic casting tube
54W9PG-1	03178L	1.875"	1.800"	16.25"	No	1,150.0	1,207.5	Paper casting tube
54W9PG-2	03178-CAP	1.875"	1.800"	20.5"	No	1,380g	1,449.0g	Plastic casting tube
03N54-2	03178-CAP	1.875"	1.800"	12.362"	0.938" dia x 0.736" deep	830.7g	919g	Plastic casting tube
03625	03180L	2.557"	2.493"	5.19"	0.875" center	604g	724.0g	
03626	03182L	3.365"	3.270"	6.00"	1.125" center	1,195g	1,455.0g	
03626-2	03182L	3.365"	3.270"	6.00"	No	1,355g	1,455.0g	Endburning

Mojave Green Grains (8526G)

Part no.	Tube P/N	O.D.	I.D.	Length	Core	Net wt.	Casting Wt.	Notes
38MGPG-1	03170-SL	1.308"	1.274"	10.5"	No	397g	417g	
03G045	03180L	2.557"	2.493"	5.19"	0.875" center	658g	788g	
03G049	03182L	3.365"	3.270"	6.00"	1.125" center	1,316g	1,567.0g	

Classic Grains (8441C)

Part no.	Tube P/N	O.D.	I.D.	Length	Core	Net wt.	Casting Wt.	Notes
54CPG-1	03178L	1.875"	1.800"	18"	No	1,237.0	1,298.9	
03C75-1	03180L	2.557"	2.493"	5.19"	0.875" center	590g	700.0g	

Metalstorm Grains (8324M)

Part no.	Tube P/N	O.D.	I.D.	Length	Core	Net wt.	Casting Wt.	Notes
38MPG-1	03170-SL	1.303"	1.274"	10.5"	No	399g	419g	

54MPG-1	03178L	1.875"	1.800"	16.25"	No	1,230.0	1,291.5	
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Metalstorm DM Grains (7524DM)

Part no.	Tube P/N	O.D.	I.D.	Length	Core	Net wt.	Casting Wt.	Notes
38DMPG-1	03170L	1.308"	1.274"	10.5"	No	372g	390.6g	
54DMPG-1	03178L	1.875"	1.800"	18.5"	No	1,310g	1,375.5g	
03DM75-1	03180L	2.557"	2.493"	5.19"	0.875" center	618g	740g	
03DM98-2	03182L	3.365"	3.270"	6.00"	1.125" center	1,197g	1,472.0g	

Propellant X Grains (8627X)

Part no.	Tube P/N	O.D.	I.D.	Length	Core	Net wt.	Casting Wt.	Notes
54XPXG-1	03178L	1.875"	1.800"	16.25"	No	1,167.0	1,225.4	
03X75-2	03180L	2.557"	2.493"	5.19"	1.00" center	608g	761g	
03X98-1	03182P-48	3.370"	3.270"	7.25"	1.50" center	1,381g	1,900g	Phenolic tube

Super Thunder Grains (8126STC)

Part no.	Tube P/N	O.D.	I.D.	Length	Core	Net wt.	Casting Wt.	Notes
03STC29-1	03165	0.933"	0.887"	7.089"	0.44" dia x 0.38" deep	116.4	123.9g	Plastic tube
03STC29-2	03165	0.933"	0.887"	8.149"	0.44" dia x 0.38" deep	134.1	142.4	Plastic tube

Delay & Smoke Grains (8023D)

Part no.	Tube P/N	O.D.	I.D.	Length	Core	Net wt.	Casting Wt.	Notes
182428DSG-2	03154L	0.562"	0.534"	3.9"	No	30g	31.5g	Mailable
182429DSG-1	03154L	0.562"	0.534"	8.16"	No	62.5g	65.6g	
2938DSG-2	03155L	0.610"	0.564"	3.50"	No	30g	31.5g	Mailable, plastic tube
2838DSG-1	03155L	0.610"	0.564"	7.31"	No	62.5g	65.6g	Plastic tube
54DSG-2	03165L	0.933"	0.887"	1.42"	No	30g	31.5g	Mailable, plastic tube
54DSG-1	03165L	0.933"	0.887"	2.96"	No	62.5g	65.6g	Plastic tube

Slow Delay Grains (8022D)

182429SDSG-1	03154L	0.562"	0.534"	8.16"	No	62.5g	65.6g	
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8221 (E6) Grains (8221)

Part no.	Tube P/N	O.D.	I.D.	Length	Core	Net wt.	Casting Wt.	Notes
248221PG-1	03160L	0.808"	0.782	13.75"	No	176.2g	185.0g	Original E6 propellant

Slow White Lightning Grains (8225SW)

Part no.	Tube P/N	O.D.	I.D.	Length	Core	Net wt.	Casting Wt.	Notes
38SWLPG-1	03170L	1.308"	1.274"	10.5"	No	398g	422g	
54SWLPG-1	03178L	1.875"	1.800"	16.25"	No	1,230.0	1,291.5	
03617	03180L	2.557"	2.493"	5.19"	0.875" center	660g	791.0g	
03618-4	03182L	3.365"	3.270"	6.00"	1.125" center	1,321g	1,608g	

New Blue Thunder Grains (8644NT)

Part no.	Tube P/N	O.D.	I.D.	Length	Core	Net wt.	Casting Wt.	Notes
29NBTPG-1	03168-S	0.995"	0.970"	12.5"	No	258g	270.9g	

Slower White Lightning Grains (8225SSW)

Part no.	Tube P/N	O.D.	I.D.	Length	Core	Net wt.	Casting Wt.	Notes
38SSWLPG-1	03170L	1.308"	1.274"	10.5"	No	398g	422g	
54SSWLPG-1	03178L	1.875"	1.800"	18.5"	No	1,400g	1,538g	