

Valve Assembly

Blended Pulse™ Application Systems

Contents Include:
Valve Selection Guide
Nozzle Types, Components,
and Part Numbers

Reference Guide

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Chapter 1: Valve Selection Guide

How to read the product description.

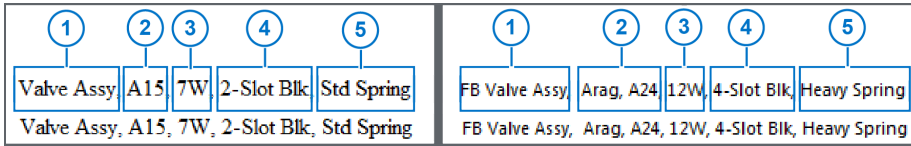


Figure 1:

- (1) Valve assembly includes: coil, plunger, flynut and valve body, and o-rings
- (2) Valve Type and Flow Rate

Abbreviation	Description
A	Arag/Hydro
AHF	Arag High Flow/John Deere High Flow
H	Hardi
T	TeeJet
W	Wilger

Valve Series	Flow Rate
15	Standard Flow 1.5 GPM Valve
24	High Flow 2.4 GPM Valve

- (3) Valve Power Rating

Power Rating	Draw
7W	0.625 A
12W	1.0 A

- (4) Plunger Description

Slot Type	Description
2-Slot Blk	2 Sidewall Grooves With Black Plunger Tip
4-Slot Blk (OBSOLETE)	4 Sidewall Grooves With Black Plunger Tip

- (5) Plunger Spring Tension

Spring Type	Description
Std Spring	Light or Standard Spring Plunger
Hvy Spring	Heavy Spring Plunger

Machine Type and Corresponding Nozzle Type

This is a list of typical nozzle types for each brand of machine. Make sure you have the same/correct nozzle type that is/will be on the machine before ordering parts.

Machine Make	Nozzle Type
AGCO	Arag
Apache	MY 2017 and before—TeeJet
	MY 2018 and after—Arag
Case IH	Arag
	Wilger
Hagie	TeeJet
Hardi	Hardi
John Deere	Arag
	Arag High Flow
Miller	TeeJet
New Holland	TeeJet

Chapter 2: Valve Assembly Types and Component Identification

Important: Make sure that you have the correct valves and components for your system.

Flybody Valve Components (OBSOLETE)

As of the end of 2021, the flybody valves have been discontinued.

For systems that used this valve design, a traditional stainless-steel valve equivalent can be used. Replacement components will still be available for the coil, plunger and O-rings.

Explanation of the flybody part numbering sequence.

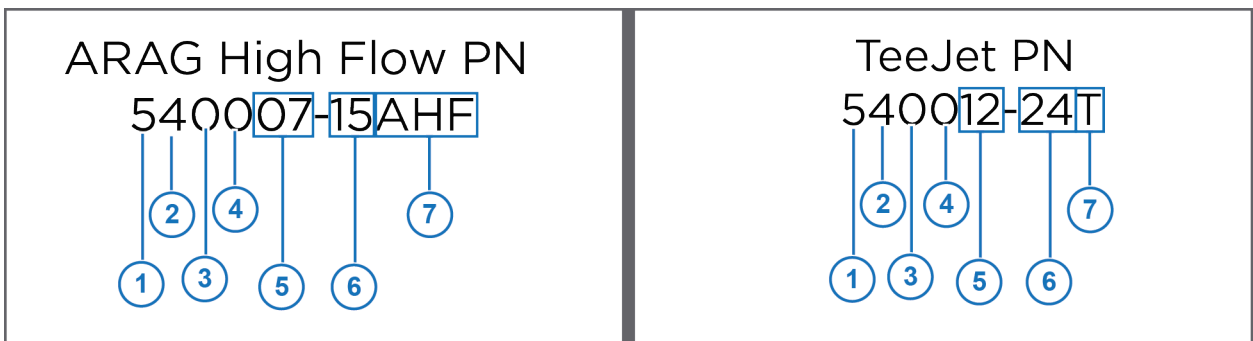


Figure 2:

Callout	Digit Location (From Left to Right)	Number/ Letter Options	Description
1	1	Always 5	Identifies a flybody valve assembly
2	2	2, 4, or x	Indicates the number of slots in the plunger
3	3	0, 1, or x	Indicated standard (0) or heavy (1) spring plunger
4	4	0 or x	Indicated the plunger tip material
5	5 and 6	07, 12, 24, or 48	Indicated the coil wattage
6	7 and 8	15 or 24	Indicated valve size
7	9, 10, and 11	A, T, or W	Indicated the nozzle body type

7-Watt—15 Series Coil Assembly Components

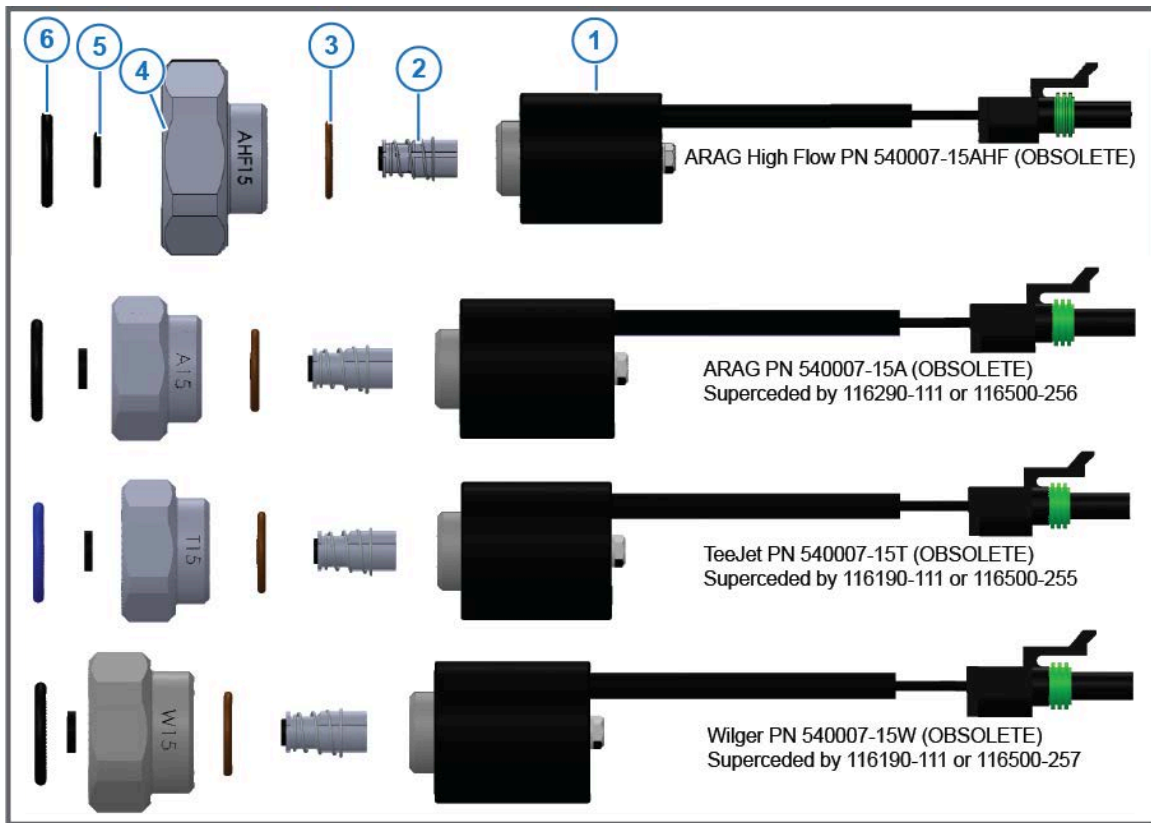


Figure 3:

Item	Description	Arag High Flow Part Number	Arag Part Number	Tee Jet Part Number	Wilger Part Number
1	7-Watt Coil Assembly	116189-111	116189-111	116189-111	116189-111
2	Plunger Assembly	716009-120*	716009-120*	716009-120*	716009-120*
3	Inner-valve O-ring	715022-204	715022-204	715022-204	715022-204
4	Flybody	116182-201	116182-001	116186-001	116188-001
		The flybody component of the valve assembly is no longer available.			
5	Flybody Stem (Tip) O-ring	715022-211	715022-210	715022-210	715022-210
6	Nozzle Body Flybody O-ring	715022-212	715022-205	715022-202	715022-206

* 716009-120 supersedes legacy plungers 716009-111 (2-slot) and 716009-114 (4-slot)

12-Watt—24 Series Coil Assembly Components

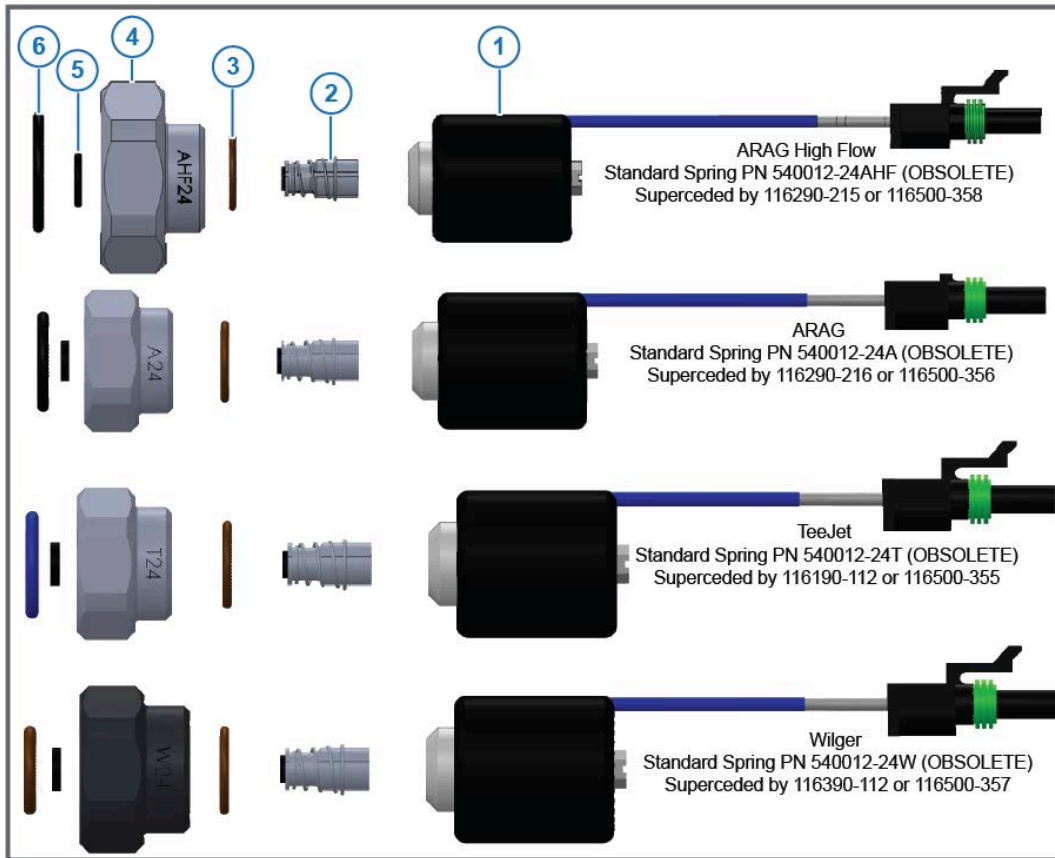


Figure 4:

Item	Description	Arag High Flow Part Number	Arag Part Number	Tee Jet Part Number	Wilger Part Number
1	12-Watt Coil Assembly	625147-011	625147-011	625147-011	625147-011
2	Plunger Assembly— Standard Spring	716009-120*	716009-120*	716009-120*	716009-120*
	Plunger Assembly— Heavy Spring	116500-299**	116500-299**	116500-299**	116500-299**
3	Inner-valve O-ring	715022-204	715022-204	715022-204	715022-204
4	Flybody	116182-202	116182-002	116186-002	116188-002
		The flybody component of the valve assembly is no longer available.			
5	Flybody Stem (Tip) O-ring	715022-211	715022-210	715022-210	715022-210
6	Nozzle Body Flybody O-ring	715022-212	715022-205	715022-202	715022-206

* 716009-120 supersedes legacy plungers 716009-111 (2-slot) and 716009-114 (4-slot)

** 116500-299 supersedes legacy plunger 716009-113

Traditional Stainless-Steel Valve Components

7-Watt Coil Components

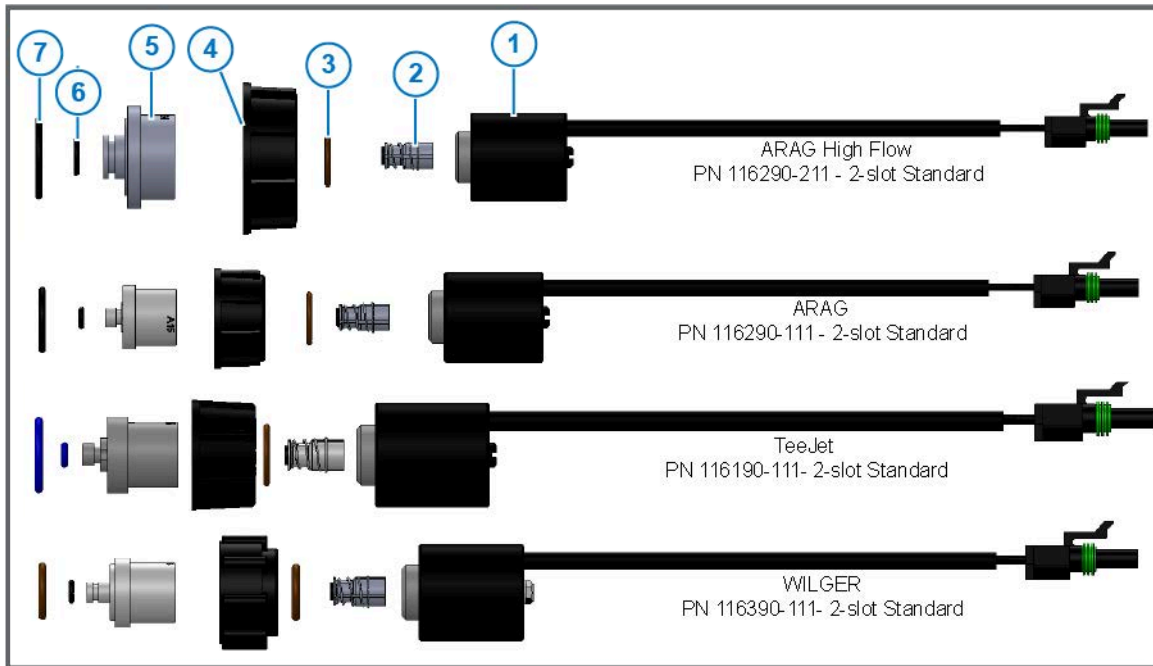


Figure 5:

Item	Description	Arag High Flow Part Number	Arag Part Number	Tee Jet Part Number	Wilger Part Number
1	Coil	116189-111	116189-111	116189-111	116189-111
2	Plunger Assembly	716009-120*	716009-120*	716009-120*	716009-120*
3	O-ring	715022-204 Size: 0-15	715022-204 Size: 0-15	715022-204 Size: 0-15	715022-204 Size: 0-15
4	Fly Nut	717101-306	717101-006	717101-105	717101-007
5	Valve Body	116182-211	116182-111	116186-111	116188-111
6	O-ring	715022-211 Size: 112	715022-201 Size: 008	715022-200 Size: 2 mm x 4 mm	715022-201 Size: 008
7	O-ring	715022-215 Size: 212	715022-205 Size: 015	715022-202 Size: 017	715022-206 Size: 016

* 716009-120 supersedes legacy plungers 716009-111 (2-slot) and 716009-114 (4-slot)

12-Watt Coil Components

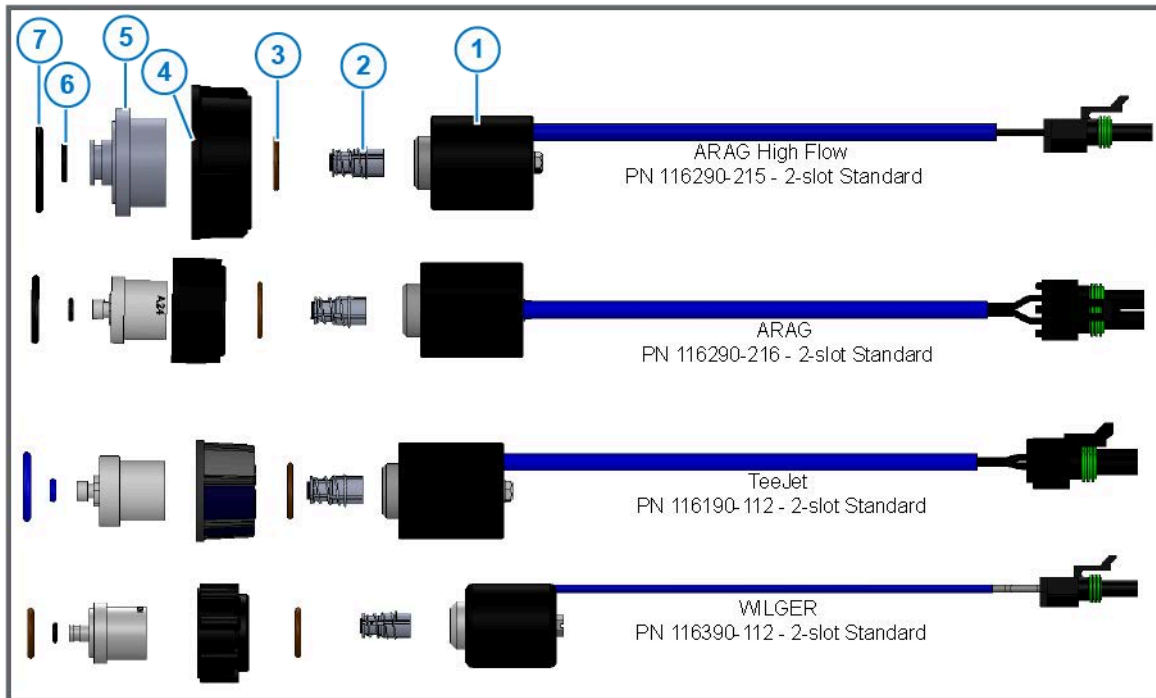


Figure 6:

Item	Description	Arag High Flow Part Number	Arag Part Number	Tee Jet Part Number	Wilger Part Number
1	Coil	625147-011	625147-011	625147-011	625147-011
2	Plunger Assembly	716009-120*	716009-120*	716009-120*	716009-120*
	Plunger—4-Slot Heavy Spring		116500-299**	116500-299**	116500-299**
3	O-ring	715022-204 Size: 0-15	715022-204 Size: 0-15	715022-204 Size: 0-15	715022-204 Size: 0-15
4	Fly Nut	717101-306	717101-006	717101-105	717101-007
5	Valve Body	116182-215	116182-150	116186-112	116188-112
6	O-ring	715022-211 Size: 112	715022-201 Size: 008	715022-200 Size: 2 mm x 4 mm	715022-201 Size: 008
7	O-ring	715022-215 Size: 212	715022-205 Size: 015	715022-202 Size: 017	715022-206 Size: 016

* 716009-120 supersedes legacy plunger 716009-111

** 116500-299 supersedes legacy plunger 716009-113

Spitfire Valve Components

Orifice Insert Components

The Spitfire valve uses a removable orifice assembly in place of the solid valve body of the legacy design valve. The different style of orifice inserts can be identified by the finishes of their mounds (1) and tails (2) which protrude from the orifice body (3). These may either be black coated (Figure 7) or bare stainless steel (Figure 8).

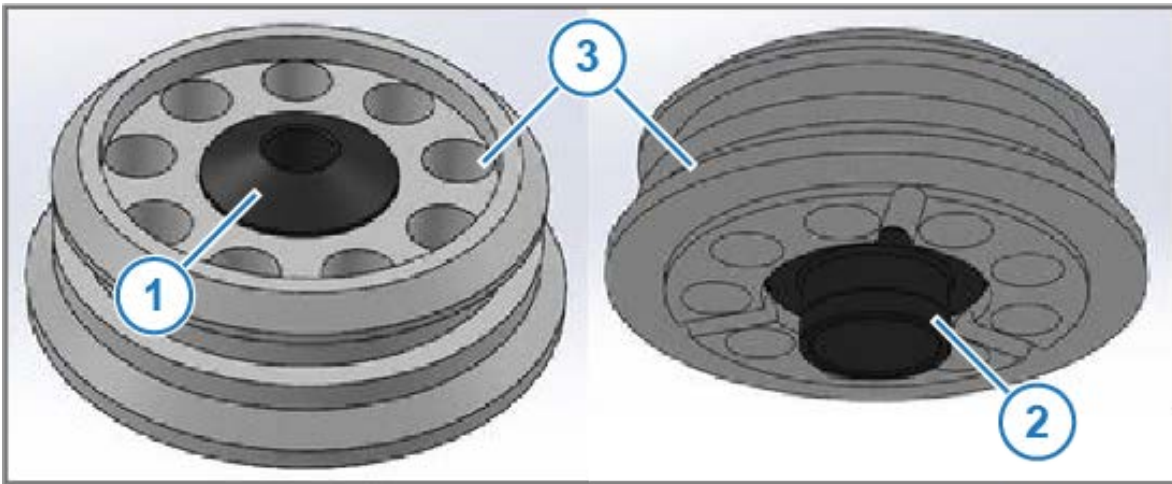


Figure 7: Black Coated Mound and Tail

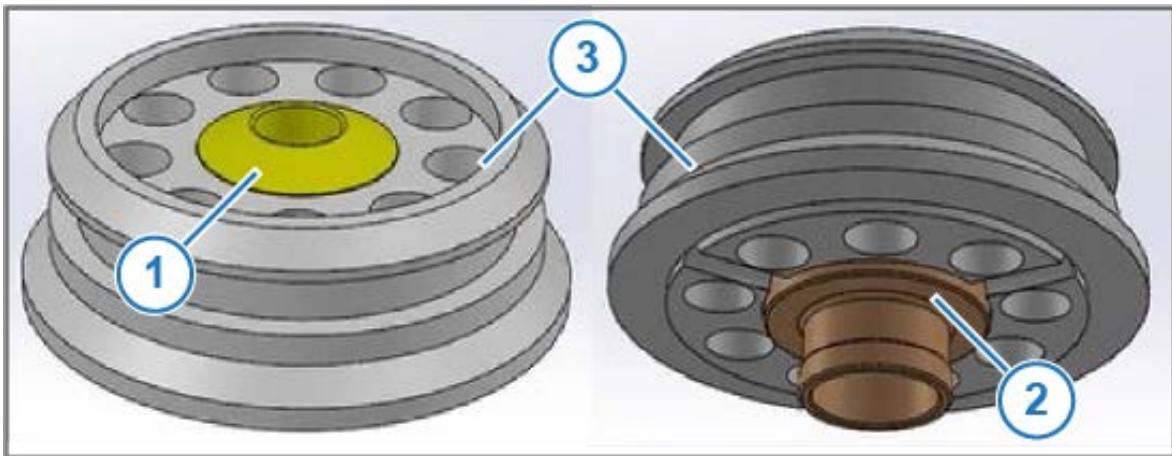


Figure 8: Stainless Steel Mound and Tail

7-Watt Coil Components

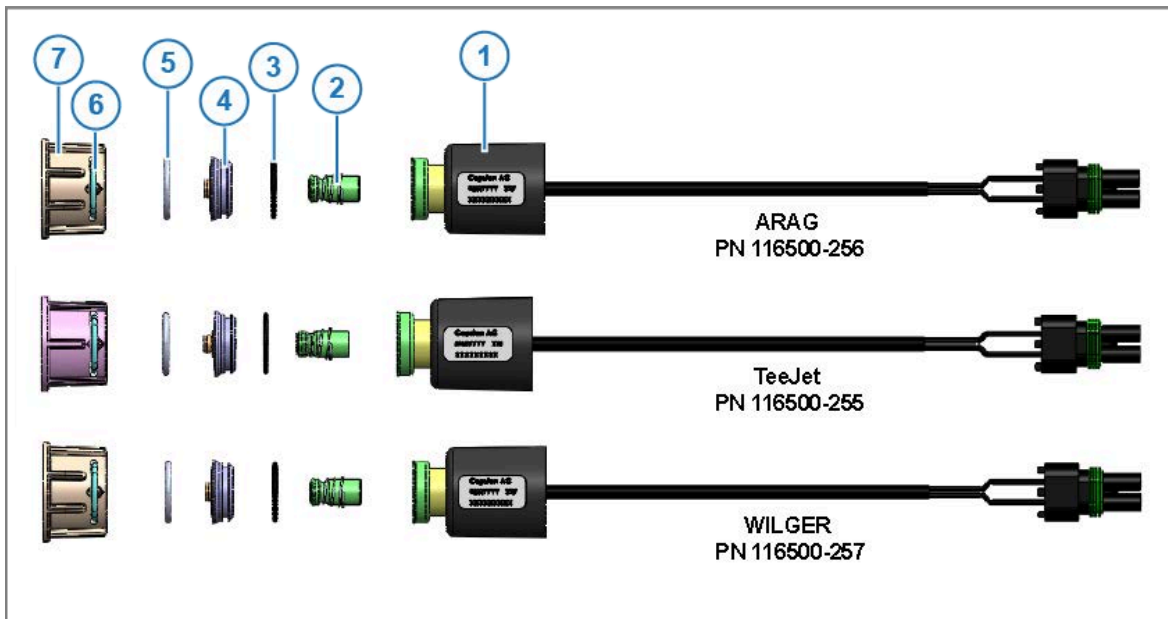


Figure 9:

Item	Description	Arag Part Number	TeeJet Part Number	Wilger Part Number
1	Coil	116500-201	116500-201	116500-201
2	Plunger	716009-120	716009-120	716009-120
3	O-ring (Inner)	116500-221	116500-221	116500-221
4	Orifice Assembly (Identifiers)	116500-243 Mound: Black Tail: Black Shoulder on Tail: No	116500-244 Mound: Black Tail: SS Shoulder on Tail: Yes	116500-244 Mound: Black Tail: SS Shoulder on Tail: Yes
5	O-ring (Spoked)	116500-225	116500-225	116500-225
6	U-clip	116500-222	116500-222	116500-222
7	Fly Nut	116500-271	116500-272	116500-273
	Plug (unpictured)	116500-278	116500-277	116500-279

12-Watt Coil Components

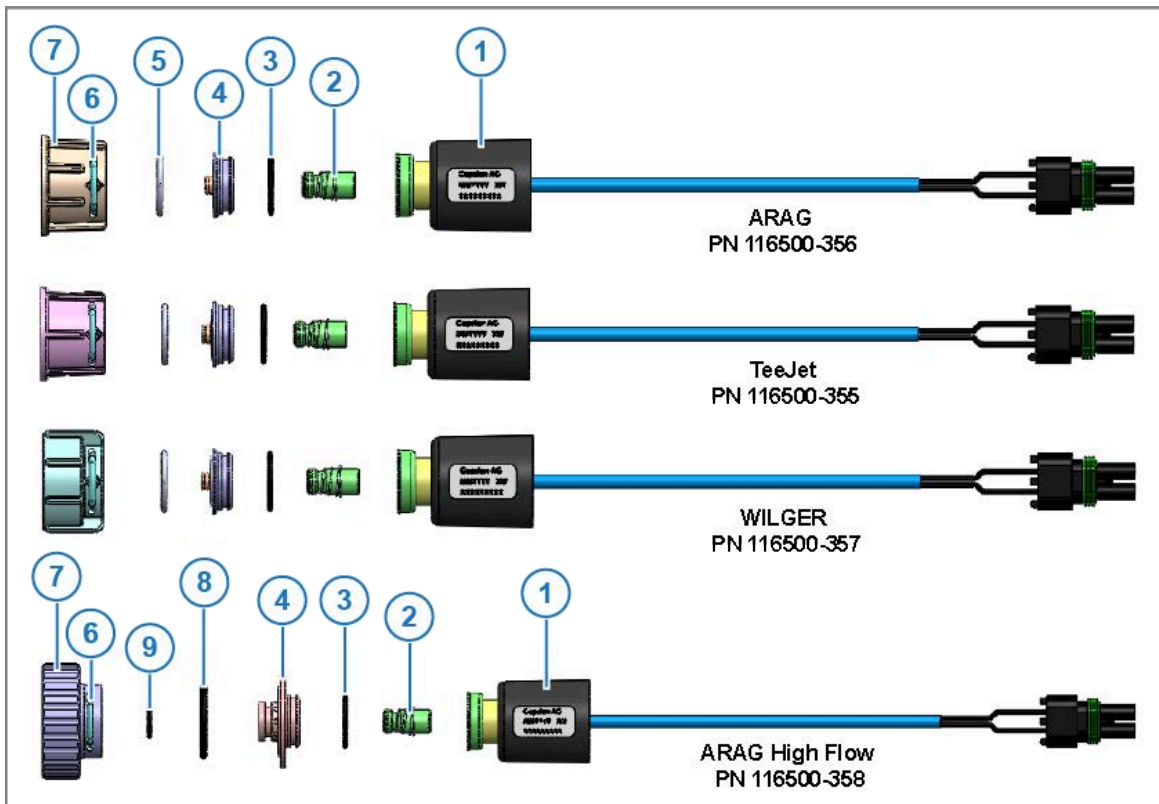


Figure 10:

Item	Description	Arag Part Number	TeeJet Part Number	Wilger Part Number	Arag High Flow Part Number
1	Coil	116500-301	116500-301	116500-301	116500-301
2	Plunger	716009-120	716009-120	716009-120	716009-120
3	O-ring (Inner)	116500-221	116500-221	116500-221	116500-221
4	Orifice Assembly (Identifiers)	116500-245 Mound: SS Tail: Black Shoulder on Tail: No	116500-246 Mound: SS Tail: SS Shoulder on Tail: Yes	116500-246 Mound: SS Tail: SS Shoulder on Tail: Yes	116500-234 Mound: SS Tail: SS Shoulder on Tail: NA
5	O-ring (Spoked)	116500-225	116500-225	116500-225	NA
6	U-clip	116500-222	116500-222	116500-222	116500-222
7	Fly Nut	116500-271	116500-272	116500-273	116500-191
8	O-ring (outer)	NA	NA	NA	715022-215
9	O-ring (stem)	NA	NA	NA	715022-211
	Plug (unpictured)	116500-278	116500-277	116500-279	116500-276



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