Gravity Fuel Filler Cap

Parker Aerospace lightning-safe gravity fuel filler caps are used to lock, seal, and act as an identifier for the gravity fill port of an aircraft fuel tank. The advantages of Parker's gravity fuel filler cap include the use of a lightweight composite base that meets current lightning-safe standards, O-rings with a fluorosilicone seal, and a lanyard made of polyurethane. Non-lightning-safe caps have lanyards of varied materials and types, such as chain links and cables.

Parker Aerospace gravity fuel filler caps are three inches in diameter, and are both indexing and non-indexing. To fuel the aircraft, the caps are manually actuated by lifting and turning the handle, which vents the fuel tank. The cap is then removed from its mating adapter, allowing the aircraft to be refueled. The cap remains attached to the aircraft by a lanyard. Once refueling is complete, the cap is inserted back into the adapter and the handle is actuated back to a closed position, which effectively reseals the gravity fill refuel port.

Parker Aerospace is the leading provider of Lightning-Safe® products for aircraft, with almost 50 years of lighting protection expertise. Our equipment will work to dissipate the static charge caused by lightning strikes and other electrical upset conditions. Parker Aerospace has unique and specialized on-site testing facilities to ensure safety and superior performance of all of its Lightning-Safe products; we were the first to patent a lightning safe seal in 1968.



Product Features

- · Lightning protection
- Ignition prevention to prevent explosions
- Mates with adapter per military standard MS27379
- Design in accordance with safety standard MIL-C-38373B
- · For use with all aircraft fuels
- O-ring seal conforms to military standard MS33666
- · Lightweight composite base
- Fluorosilicone seal
- Polyurethane lanyard
- Available as Lightning Safe® application
 - Lightning protection, ignition prevention, and pump and vent protection

Specifications

Designed in accordance with MIL-C-38373B.					
Cap diameter	3"				
Mates with adapter	Per MS27379				
Pressure					
- Operating	50 psig				
- Proof	75 psig				
- Burst	100 psig				
Installation torque on handle	50 in-lbs or less				
O-ring seal conforms	Per MS33666				
Attachment for lightning safe caps (polyurethane lanyard)	Will withstand a 40-lb pull test				
Non-lightning-safe caps have lanyards of varied material and type					
For use with all aircraft fuels and temp ranges	-67°F to 135°F and 158°F ambient				

Applications

Parker Aerospace's gravity fuel filler caps are used on a multitude of aircraft (both winged and rotary) by countless customers worldwide.

- · Commercial & regional aviation
- Military
- General aviation
- · Business jets

Optional Features

- Key lock
- Vented
- Hinged
- Visual fluid-level indicator
- Dust cover
- Easy-lift handle
- Contoured adapter

Contact Information

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Fuel: Gravity Filler Caps

A partial listing of our fuel gravity filler caps is provided in the table below. More information is available upon request.

Part Number	Size	Proof Pressure	Lightning Safe	Features
39051-1	3"	75 PSIG	Y	6" lanyard
39051-2	3"	75 PSIG	Y	No lanyard
39051-3	3"	75 PSIG	Υ	12" lanyard
39132	3"	75 PSIG	Υ	0.100" spacer on face of cap
39139	3"	0 PSIG	Υ	Venting into tank
39155	3"	75 PSIG	Υ	0.055" spacer on face of cap
39171	3"	20 PSIG	Υ	Locking, Illinois lock
39174	3"	20 PSIG	Υ	Hinged to adapter
39224	3"	20 PSIG	Υ	Venting into tank Locking, Illinois lock
39259	3"	20 PSIG	Y	Locking, Medco lock
39280	3"	75 PSIG	Y	0.180" spacer on face of cap Venting Into tank
39301	3"	75 PSIG	Υ	0.200" spacer on face of cap Venting into tank
416-50	3"	25 PSIG	N	Non-indexing
416-1617	3"	25 PSIG	N	Non-indexing High-polished nickel plate Locking, Illinois lock
416-1664	3"	25 PSIG	N	Non-indexing Vented in tank
416-1672	3"	25 PSIG	N	Non-indexing High-polished nickel plate Vented into tank
416-1552	3"	25 PSIG	N	Non-indexing Visual indicator
416-1540	3"	25 PSIG	N	Non-indexing Hinged to adapter
416-1517	3"	10 PSIG	N	Non-indexing Expansion pug



Fuel: Gravity Adapters

A partial listing of our fuel gravity adapters is provided in the table below. More information is available upon request.

Part Number	Flange Diameter	Bolt Holes	Style	Options	Envelope
457-3	5.50"	12 x .281 diameter on 4.75" B.C.	Flat		120 4 - 25 - 25 - 25 - 25 - 25 - 25 - 25 - 2
457-728	5.50"	6 x .198 diameter on 4.87" B.C.	Flat	Counter sunk holes	
457-1650	5.85"	12 x .125 diameter on 5.19" B.C.	Flat	Molded face seal	(1.000)
457-1652	5.44"	12 x .312 diameter on 4.88" B.C.	Flat	Reinforcing spacer	130 m m m m m m m m m m m m m m m m m m m
457-1659	5.44"	None	Flat		2450 DM
457-1561	6.20"	None	Radiused	Contoured	117 or 1270000 127000 127000 127000 127000 127000 127000 127000 127000 1270000 127000 127000 127000 127000 127000 127000 127000 127000 1270000 127000 127000 127000 127000 127000 127000 127000 127000 1270000 127000 127000 127000 127000 127000 127000 127000 127000 127000 127000 127000 127000 127000 127000 127000 127000 127000 12700



Fuel: Gravity Adapters

Part Number	Flange Diameter	Bolt Holes	Style	Options	Envelope
457-1644	7.00"	12 x .192 diameter on 5.50" B.C.	Cylindrical radius	10-32 UNJF-3B self- locking floating nut plates	THE STATE OF THE S
457-2029	5.50"	12 x .247 diameter on 4.75" B.C.	Radiused	Anti-sipn on adapter with 10-32 UNJF-3B self locking floating nut plates	(# 1.000) (# 1.000)
416-3B1	4.45"	12 x .280 diameter on 4.75" B.C.	Flat	Counter-sunk holes, high-polish, screen, full level indicator	100 × 100 ×

