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GG10 SERIES GASGUARD NOZZLE

RECOMMENDED MAINTENANCE & REPAIR PROCEDURES

The following statements on the maintenance and repair of the GasGuard GG10 Series L.P.Gas Nozzle are designed to offer ELAFLEX PACIFIC authorised international Distributors, O.E.M's & Service Centres recommended methods to bring back into serviceable condition Nozzles which require maintenance or repair.

ELAFLEX PACIFIC recommendations are based on over twenty-five years of experience in the manufacture, assembly and testing, and repair of such Whilst ELAFLEX PACIFIC recommended procedures, as set out below, Nozzles. allow for proper repair and maintenance to be carried out on Nozzles, and cannot be held responsible for performance of repaired Nozzles.

ELAFLEX PACIFIC has available a GG103 SEAL KIT for the GG10 Nozzle Series. It contains seal components and wear items for proper service of the GG10 Nozzle. Other components that are worn or damaged should be replaced on a needs basis. Refer to the assembly drawings for component detail and part numbers, throughout this document.

Age, wear and abuse of the product can render repair inappropriate, and it may be considered more economical to replace full Assemblies or even scrap the Nozzle where service inspection clearly indicates such action is required.

A. THE GASGUARD GG10 NOZZLE ASSEMBLY

The GG10 GasGuard Nozzle is supplied with either a straight or 45 degree elbow with 1" or 1 ¹/₄" N.P.T. internal inlet thread for hose end connection. It is necessary to specify this thread when ordering appropriate spare parts or Nozzle assemblies.

The GG10 Nozzle Assembly consists of the following Sub-assemblies:-

1)	Swivel Sub-Assembly	-	GG102 X 1
,	-	-	GG102 x 1¼"
		-	GG102 x 1", 45
		-	GG102 x 1 ¼ ", 45
ii)	Body	-	10-1411-803
iii)	Connector Sub-Assembly	-	GG107
iv)	Lever Sub-Assembly	-	GG105
v)	Valve Body Sub-Assembly	-	GG104

B. TOOLS RECOMMENDED FOR SERVICE ON THE GG10 NOZZLE

L.G.E. recommends the following tools be available to facilitate repair and maintenance of the Nozzle:-

- i) Adjustable Spanner (Wrench) Opening to 51mm (2") across flats,
- ii) Large Face Screw Driver,
- iii) 1/8" Drift (Punch),
- iv) Bench vice,
- v) 3.0mm + 5.0mm across flats allen key, (Long Shank),
- vi) Small hammer for use with Drift,
- vii) Socket (Hex) set for Locknut,
- viii) Pin Spanner for Dash Pot Housing,
- ix) 17mm Spanner

C. ASSEMBLY GREASE RECOMMENDED FOR SERVICE ON THE GG10 NOZZLE

L.G.E. recommends and uses the following greases for general lubrication of moving parts and threads in the assembly of the GasGuard Nozzle:-

- i) Aeroshell 22 (Grease) or equivalent grease for use on all threads Apply to external threads only,
- ii) Dow Corning Molycote FS3451 Fluorosilicone Grease (Molycote) for use on all dynamic O Ring seals a thin film of Molycote is adequate.
- iii) Nulon L90 "Xtreme Pressure" Anti seize Lubricant.

The particular grease should be applied sparingly by a good quality small brush.

L.G.E. particularly recommends the use of the above greases where ambient temperatures can get down to -55 degrees Celsius. Of course they provide satisfactory properties up to +80 degrees Celsius.

Aeroshell 22 Grease should be applied sparingly by a small brush. It should be used to lubricate all threads and close fitting parts prior to their assembly to mating components and/or assemblies.

Molycote grease may be used to assist easy fitment of seals: U cup, Back-up ring concave face and O-Ring type before their assembly into their related grooves/recesses, or shoulders. A thin film of Molycote is adequate

Nulon L90 Grease is recommended to be used on rotating parts. Used sparingly with a small brush it should be applied to the slide sleeve, from the bearing at the top down to the ball groove, after seals and bearings have been assembled.

The above greases are available from most lubricant specialist outlets.

D. MAINTENANCE & REPAIR PROCEDURES - refer Dwg. No. X1432 C

- a. Inlet Swivel Assembly (GG102)
- 1. Remove the Inlet Swivel from the Nozzle Body (c11), to do this remove the Locking Screw (a6) and unscrew the Inlet Swivel via the spanner flats of the internal Swivel Body (a1).
- 2. If nozzle is fitted with Strainer (a10), make sure this is removed, replace if damaged.
- Remove the Ball Race Plug (a9) and remove the Ball Bearings (a8) 22 only by counter-rotation and if necessary using some turpentine or similar to loosen the ball race grease. Pull apart the Internal (a1) and External (a2) Swivel Bodies. Remove all Seals, Back-up Rings and discard.
- 4. Clean all parts and wipe dry. Obtain and check new Seals etc. from the GG103SW (Inlet Swivel Seal Kit), GG103SW,45 (45° Inlet Swivel Seal Kit) or GG103 (Full Seal Kit), i.e. items a3, a4i, a4ii, a5, a7.
- 5. For re-assembly apply a thin film of Aeroshell 22 or similar grease to the Seal areas and Ball Race grooves of the External Swivel Body (a2).
- 6. Assemble the Main O'ring Seal (a4i, a4ii) then its Back-up Ring (a5) to the Internal Body (a1), ensuring that the concave section of the Back-up Ring is against the O Ring. Ensure that this 'O' Ring set is in it correct orientation and is properly housed square in bore of the Internal Body.
- 7. Assemble the O Ring Dust Seal (a7) to the External Body.
- 8. With an easy twisting and pushing motion, assemble the External Swivel to the Internal Swivel. Place this assembly in the vice, using the flats of the Internal Swivel, and assemble the Ball Bearings (a8) through the entry hole. A slight axial pressure may be necessary to insert the first Ball; thereafter they can be inserted by turning the External Swivel Body slowly to facilitate assembling all 22 Ball Bearings.
- 9. Fit the Ball Race Plug (a9) to the hole, ensuring that the convex faces on the outside.
- 10. Insert the Strainer (a10) and the 'O' Ring Body/Swivel Seal (a3) to the bore of the Nozzle Body before inserting the swivel. Then with a slight smear of grease to the external thread of the Internal Swivel (a1) only, screw connect the Inlet Swivel Assembly to the Nozzle Body (c11) using a spanner on the flats of the Internal Swivel (a1). Screw both together to the face of contact with a maximum 41 Nm (30 ft.lbs.) torque. Assemble Locking Screw (a6) to Nozzle Body with Allen Key.
- 11. Rotate External Swivel relative to Internal Swivel. This rotational torque may be high initially, but it will become easier with use.

b. Connector Assembly (GG107)

- 1. Remove Swivel Nut Sub-assembly from Nozzle by removing Grub Screw (d2) of GG105 Lever Assembly, withdrawing the Lever Pivot Pin (d3). The Swivel Nut Assembly can now be removed from the Valve/Body Assembly.
- 2. Unscrew the Ball Plug (b9) of the Connector Assembly and remove the Ball Bearings (b8) 31 only. A small amount of turpentine or similar dropped into the Ball Plug screw hole could assist the Ball Bearing removal.
- 3. Withdraw the Connector Nut (b3) and remove the Internal (b7) and External (b6) Split Bearings from their grooves in the Slide Sleeve (b11) and discard same. Remove the GG106 Nose Piece Assembly (b1, b2).
- 4. Remove Internal (b4) and External (b5) Lip Seals and Red Dust Lip Seal (c18) and replace with new Seals.
- 5. Remove GG106 Nose Piece. Thoroughly clean the Nose Piece, and refit the replacement 10-0118-707 Nose "O" Ring (b1).
- 6. Clean all parts removed and to be used in the re-assembly of this GG107 Assembly and dry thoroughly. Apply a thin film of Nulon L90 grease to the external machined surface of the Slide Sleeve (b11).
- 7. Insert the GG106 Nose Piece Assembly (b1, b2) into the Connector Nut (b3). Gently rotate and push the Slide Sleeve into the Connector Nut and align the ball race groove of the Slide Sleeve with the Ball Plug tapped hole of the Connector.
- 8. Hold the Connector lightly in a vice with the Ball Race Plug hole facing upwards and insert the thirty-one (31) only stainless steel Ball Bearings (b8) into the groove at the same time slowly rotating the Slide Sleeve to assist entry.
- 9. Apply a small amount of Loctite 263 Thread locker or similar to the Ball Plug (b9) and screw same into its position flush with the Lug of the Connector.
- 10. Rotate the Connector Nut (b3) on the Slide Sleeve (b11) to ensure free movement of same.
- 11. Place on one side for final assembly to the repaired GG10 Nozzle.

c. Valve/ Body Assembly (GG104)

Unless the Valve Body (c2) is damaged or worn, it is not necessary to remove the Valve Body from the Nozzle Body (c11).

- 1. Remove the Piston Cap (c13) from the Nozzle Body using a Pin Spanner. The Valve Springs (c14,c15) and Valve Stem Assembly (c3-c10) can now be extracted.
- 2. Check the sealing face of the Valve Seat (c3) is not damaged.
- 3. The Valve Head Assembly (c3-c5) cannot be broken down into single parts and comes instead as an assembly in the GG103 Seal Kit. If the Valve Seat (c3) is damaged it should be replaced. To do this, hold the Valve Stem (c7) vertically in a vice. Apply heat to the bottom of the Valve Seat Housing (c5), while avoiding damage to the Valve Stem Guide (c6). After 30-40 seconds @ 150 °C, the Locktite should have weakened and a 17mm spanner can be used to carefully remove the Valve Head Assembly (c3-c5) from the Valve Stem (c7).
- 4. Refit the Valve Stem Guide to the Valve Shaft and apply a small amount of Locktite 263 to the Shaft thread and screw the Stem into the assembled Valve Head.
- 5. Replace the Dash Pot Piston Bearing (c9). Clean and check the condition of the metal Valve Shaft Assembly components. If in doubt about the condition of the component they should be replaced.
- 6. The Valve Stem Assembly is now ready for assembly into the Valve/Body Assembly.
- 7. It is important to replace the "U" Cup Seal (c1) before assembling the Valve Stem Assembly. Slide a small flat faced screw driver under the "U" Cup Seal and carefully remove it from the front seal groove in the Valve Body (c2) IMPORTANT: Try to avoid scratching the back face of the U-Cup seal groove. Once seal is removed, clean the groove surface, check for any damage and then replace with an new "U" Cup Seal (c1).

Re-assembly of the Valve Stem Assembly into the back of the Nozzle Body (c11) can now begin.

- 8. Hold the Nozzle Body (c11) in a vice so the opening is facing upwards. Lower the Valve Stem Assembly into the back of the Nozzle Body and fit the two Valve Springs (c14, c15) onto the top of the Dash Pot Piston (c8).
- 9. Use the cleaned Piston Cap (c13) with a new lightly greased "O" Ring (c12) and Lever Wear Pad (c16). With downward pressure and clockwise rotation, refit the Piston Cap over the two springs and Valve Piston and engage the thread using the Pin Spanner until tight.

With the Inlet Swivel and Valve/Body Assemblies together a primary leak detection test can be performed when able.

- 1. Attach the Inlet Swivel to Nitrogen or similar @ 4-8bar.
- 2. Pressurize the sub-assembly and submerge it in water for 1 minute. If no bubbles are found while submerged, the sub-assembly can then be used to build the rest of the nozzle.

d. Assembly of GasGuard GG10 Nozzle - refer Dwg. No. X1432 C

- 1. You will have three (3) Sub-assemblies ready for assembling into a complete GG10 Nozzle Assembly, i.e. Valve/Body Assembly (GG104) with Inlet Swivel (GG102), Connector Assembly (GG107) & Lever Assembly (GG105), shown in X1432 C.
- 2. Lightly grease the External Surface of the Valve Body (c2) with Nulon L90 before adding the cleaned Connector Spring (b12). Assemble the Swivel Nut Sub-assembly to the Valve/Body Sub-assembly and ensure that there is free but spring loaded movement between the two.
- 3. The Lever Assembly can now be fitted. Place the front of the nozzle on a table, push the Valve/Body Assembly into the Connector Assembly. Once this is loaded fit the Lever (d1) between the forks of the Slide Sleeve (b11), when the hole of the Slide Sleeve and the Lever line up, you can insert the Lever Pivot Pin (d3) through these aligned holes.
- 4. Operate the Nozzle Lever in the normal manner to ensure free and full operation.

E. TESTING THE GASGUARD NOZZLE

PLEASE NOTE THAT ALL SUCH TESTS USING LPGAS SHOULD BE CARRIED OUT OUTSIDE ANY ENCLOSED FACTORY/WORKSHOP ENVIRONMENT AND SHOULD BE DONE AS PER LOCAL SAFETY REGULATIONS.

- 1. It is recommended that the GasGuard Nozzle be tested using LPGas (propane) as the testing medium at the normal flow pressures between (1200-1800kPa) (174-260 p.s.i.) (12-18bar) experienced in practice.
- 2. L.G.E. recommends two (2) series of tests be carried out; a static and dynamic flow test. With the static test, the Nozzle is assembled to a supply hose and then loaded with LPGas. We recommend that an isolating valve be installed at the connection end of the hose to the Nozzle for safety purposes.
- 3. Use detergent mixed with water to test the swivel connection to the Nozzle for total pressure security, applying a bending moment to same of approx. 20 foot pounds whilst rotating the Swivel slowly.
- 4. Check the security of the Main Valve and its operation by activating the Lever fully. In this condition there must be no leak from the Main Valve to atmosphere.
- 5. With the flow test, connect the Nozzle Assembly to a Filler Valve fitted with a downstream choked outlet or piped away to a receiving tank or safe outlet to atmosphere.
- 6. Check the performance of the Nozzle for flow and pressure security when the Lever is actuated and released. The interstitial trapped gas will not release on Lever shutdown. The operator is required to unscrew the Nozzle Swivel Nut from the Adaptor and control the slow release of entrapped gas.
- 7. If LPGas is not available a satisfactory substitute testing medium is bottled nitrogen set on its Regulator at 1800 kPa.
- 8. At the conclusion of satisfactory tests, remove the Nozzle from the hose, carefully depressurise the hose, and fit the Cotter Pin (F4) of the Lever Sub-assembly to the Lever Pivot Pin (F3).

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IF ALL THE ABOVE PROCEDURES ARE CARRIED OUT WITH CARE AND ATTENTION TO DETAIL, YOUR GASGUARD NOZZLE WILL PROVIDE YOU WITH SATISFACTORY SERVICE. HOWEVER, ELAFLEX PACIFIC CANNOT BE HELD RESPONSIBLE FOR ANY INCORRECT OPERATING PROCEDURES ASSOCIATED WITH THIS RECOMMENDED REPAIR AND MAINTENANCE PROCEDURE.

IF YOU FIND THAT THERE ARE OPERATING FEATURE FOR WHICH YOU DRAW CONCERN, ELAFLEX PACIFIC RECOMMENDS THAT YOU CONTACT ITS DISTRIBUTOR OR HEAD OFFICE FOR ASSISTANCE.

Prepared By:

L.G. Equipment Pty. Ltd *a division of ELAFLEX HIBY Tanktechnik GmbH & Co.* Unit 29/58 Box Road, Taren Point, NSW, 2229



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		BILL OF MATERIALS			
ITEM PART NO.		DESCRIPTION	REQ'D	MATERIAL	
1	10-1425-803	GG10 Slide Sleeve	1	Aluminium	
2	10-0500-603	Ball 5mm St-Steel	31	316 Stainles Steel	
3	10-0674-707	Lip Seal - Outer	1	L.T. Polyurethane	
4	10-0672-707	Lip Seal - Inner	1	L.T. Polyurethane	
5	10-1412-707	GG10 Dust Seal	1	L.T. Polyurethane	
6 (i)	10-0870-141	Split Bearing	1	Acetal	
6 (ii)	10-0870-141	Split Bearing (trimmed)	1 1	Acetal	
7	10-1406-804	GG10 Nose		Anodised Aluminium L.T. Polyurethane	
8	10-0118-707	Nose Piece O'ring	1		
9	10-1426-130	0-1426-130 GG10 Tapered, Guided Thread Insert 0-1428-803 Connector Body		316 Stainless Steel Aluminium	
10	10-1428-803				
11	10-0606-544	Ball Locking Screw	1	316 Stainless Steel	
12	10-0406-544	10-0406-544 GG10 Lever Lock Screw		316 Stainless Steel	
13	10-1424-400	GG10 Connector Spring	1	Spring Steel - Plated	
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ITEM	PART NO.	BILL OF MATERIA DESCRIPTION	ALS REQ'D	MATERIAL							
ITEM	PART NO. 10-2533-707	BILL OF MATERIA DESCRIPTION GG10 Tail U-Cup Seal	ALS REQ'D	MATERIAL SUPER PU 95					/////		
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ITEM 1 2 3	PART NO. 10-2533-707 10-1444-803 10-1441-130	BILL OF MATERIA DESCRIPTION GG10 Tail U-Cup Seal GG10 Valve Body GG10 Valve Head Screw CG10 Valve Head Screw	ALS REQ'D 1 1 1	MATERIAL SUPER PU 95 Mild Steel - Plated 316 Stainless Steel							
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ITEM 1 2 3 4 5 6 7 8 9 10 11 12 13 14	PART NO. 10-2533-707 10-1444-803 10-1441-130 10-1442-711 10-1443-130 10-1443-130 10-1447-141 10-1445-803 10-1445-804 10-1452-141 10-0005-511 10-1413-141 10-1412-707 10-0128-703 10-1411-803	BILL OF MATERIA DESCRIPTION GG10 Tail U-Cup Seal GG10 Valve Body GG10 Valve Body GG10 Valve Head Screw GG10 Valve Seat GG10 Valve Seat GG10 Valve Stem GG10 Valve Stem GG10 Dash Pot Piston GG10 Dash Pot Piston GG10 Dash Pot Bearing Nyloc Nut - M5 GG10 Split Bearing GG10 Dust Seal GG10 O'ring/Valve Body GG10 Nozzle Body	ALS	MATERIAL SUPER PU 95 Mild Steel - Plated 316 Stainless Steel Viton GLT 506 316 Stainless Steel Acetal Mild Steel - Plated Anodised Aluminium Acetal Stainless/Nylon Acetal L.T. Polyurethane L.T. Nitrile Mold Aluminium	Catalog-no.	21 General tolerances: DIN ISO 2768-1 &-2 class mK	Tolerances	C-C ((0.5 : 1)	Weight Raw part no.
ITEM 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	PART NO. 10-2533-707 10-1444-803 10-1441-130 10-1442-711 10-1443-130 10-1443-130 10-1447-141 10-1445-803 10-1445-804 10-1452-141 10-0005-511 10-1413-141 10-1412-707 10-0128-703 10-1411-803 10-0606-544	BILL OF MATERIA DESCRIPTION GG10 Tail U-Cup Seal GG10 Valve Body GG10 Valve Body GG10 Valve Head Screw GG10 Valve Seat GG10 Valve Seat GG10 Valve Stem GG10 Valve Stem GG10 Dash Pot Piston GG10 Dash Pot Piston GG10 Dash Pot Bearing Nyloc Nut - M5 GG10 Split Bearing GG10 Dust Seal GG10 Dust Seal GG10 O'ring/Valve Body GG10 Nozzle Body Ball Lock Screw Inlet	ALS	MATERIAL SUPER PU 95 Mild Steel - Plated 316 Stainless Steel Viton GLT 506 316 Stainless Steel Acetal Mild Steel - Plated Anodised Aluminium Acetal Stainless/Nylon Acetal L.T. Polyurethane L.T. Nitrile Mold Aluminium 316 Stainless Steel	Catalog-no.	21 General tolerances: DIN ISO 2768-1 &-2 class mK	Tolerances	C-C ((0.5 : 1)	Weight Raw part no.
ITEM 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	PART NO. 10-2533-707 10-1444-803 10-1441-130 10-1442-711 10-1442-711 10-1443-130 10-1443-130 10-1445-803 10-1445-803 10-1445-804 10-1452-141 10-0005-511 10-1413-141 10-1412-707 10-0128-703 10-1411-803 10-0606-544 10-1448-400	BILL OF MATERIA DESCRIPTION GG10 Tail U-Cup Seal GG10 Valve Body GG10 Valve Body GG10 Valve Head Screw GG10 Valve Head Screw GG10 Valve Seat GG10 Valve Stem Guide GG10 Valve Stem GG10 Dash Pot Piston GG10 Dash Pot Piston GG10 Dash Pot Bearing Nyloc Nut - M5 GG10 Split Bearing GG10 Dust Seal GG10 Dust Seal GG10 O'ring/Valve Body GG10 Nozzle Body Ball Lock Screw Inlet GG10 Stem Spring - Inner	ALS	MATERIAL SUPER PU 95 Mild Steel - Plated 316 Stainless Steel Viton GLT 506 316 Stainless Steel Acetal Mild Steel - Plated Anodised Aluminium Acetal Stainless/Nylon Acetal L.T. Polyurethane L.T. Nitrile Mold Aluminium 316 Stainless Steel Spring Steel - Plated	Catalog-no.	Ceneral tolerances: DIN ISO 2768-1 &-2 class mK	Tolerances Date Design 10.4.2014	C-C ((0.5 : 1	(0.5:1)	Weight Raw part no.
ITEM 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	PART NO. 10-2533-707 10-1444-803 10-1441-130 10-1442-711 10-1442-711 10-1443-130 10-1443-130 10-1445-803 10-1445-803 10-1445-803 10-1452-141 10-0005-511 10-1412-707 10-0128-703 10-1411-803 10-0606-544 10-1449-400	BILL OF MATERIA DESCRIPTION GG10 Tail U-Cup Seal GG10 Valve Body GG10 Valve Body GG10 Valve Head Screw GG10 Valve Seat GG10 Valve Stem Guide GG10 Valve Stem GG10 Dash Pot Piston GG10 Dash Pot Piston GG10 Dash Pot Bearing Nyloc Nut - M5 GG10 Split Bearing GG10 Dust Seal GG10 Dust Seal GG10 O'ring/Valve Body GG10 Nozzle Body Ball Lock Screw Inlet GG10 Stem Spring - Inner GG10 Stem Spring - Outer	ALS	MATERIAL SUPER PU 95 Mild Steel - Plated 316 Stainless Steel Viton GLT 506 316 Stainless Steel Acetal Mild Steel - Plated Anodised Aluminium Acetal Stainless/Nylon Acetal L.T. Polyurethane L.T. Nitrile Mold Aluminium 316 Stainless Steel Spring Steel - Plated	Catalog-no.	Ceneral tolerances: DIN ISO 2768-1 &-2 class mK	Tolerances Design Date Design 10.04.2014 Verified Verified	C-C ((0.5 : 1	(0.5:1)	Weight Raw part no.
ITEM 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	PART NO. 10-2533-707 10-1444-803 10-1441-130 10-1442-711 10-1442-711 10-1443-130 10-1443-130 10-1445-803 10-1445-803 10-1445-803 10-1452-141 10-0005-511 10-1412-707 10-0128-703 10-1411-803 10-0606-544 10-1448-400 10-1449-400 10-0130-703	BILL OF MATERIA DESCRIPTION GG10 Tail U-Cup Seal GG10 Valve Body GG10 Valve Body GG10 Valve Head Screw GG10 Valve Seat GG10 Valve Stem Guide GG10 Valve Stem GG10 Dash Pot Piston GG10 Dash Pot Piston GG10 Dash Pot Bearing Nyloc Nut - M5 GG10 Split Bearing GG10 Dust Seal GG10 Ovring/Valve Body GG10 Nozzle Body Ball Lock Screw Inlet GG10 Stem Spring - Inner GG10 Stem Spring - Outer GG10 O'ring Dashpot & Inlet	ALS REQ'D 1	MATERIAL SUPER PU 95 Mild Steel - Plated 316 Stainless Steel Viton GLT 506 316 Stainless Steel Acetal Mild Steel - Plated Anodised Aluminium Acetal Stainless/Nylon Acetal L.T. Polyurethane L.T. Nitrile Mold Aluminium 316 Stainless Steel Spring Steel - Plated Spring Steel - Plated L.T. Nitrile Mold		Ceneral tolerances: DIN ISO 2768-1 &-2 class mK	Tolerances Design 10.04.2014 Verified Norm	C-C ((0.5 : 1	(0.5:1) (0.5:1) GGG1(G10 Valve/ Boo	Weight Raw part no.
ITEM 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	PART NO. 10-2533-707 10-1444-803 10-1441-130 10-1442-711 10-1442-711 10-1443-130 10-1445-803 10-1445-803 10-1445-803 10-1445-803 10-1452-141 10-0005-511 10-1412-707 10-0128-703 10-1411-803 10-0606-544 10-1448-400 10-1449-400 10-0130-703 10-1415-803	BILL OF MATERIA DESCRIPTION GG10 Tail U-Cup Seal GG10 Valve Body GG10 Valve Body GG10 Valve Head Screw GG10 Valve Seat GG10 Valve Stem Guide GG10 Valve Stem Guide GG10 Dash Pot Piston GG10 Dash Pot Piston GG10 Dash Pot Bearing Nyloc Nut - M5 GG10 Split Bearing GG10 Dust Seal GG10 O'ring/Valve Body GG10 Nozzle Body Ball Lock Screw Inlet GG10 Stem Spring - Inner GG10 Stem Spring - Outer GG10 O'ring Dashpot & Inlet GG10 Dash pot	ALS REQ'D 1	MATERIAL SUPER PU 95 Mild Steel - Plated 316 Stainless Steel Viton GLT 506 316 Stainless Steel Acetal Mild Steel - Plated Anodised Aluminium Acetal L.T. Polyurethane L.T. Nitrile Mold Aluminium 316 Stainless Steel Spring Steel - Plated Spring Steel - Plated L.T. Nitrile Mold Mild Steel - Plated		Ceneral tolerances: DIN ISO 2768-1 &-2 class mK	Tolerances Date Design 10.04.2014 Verified Norm	C-C ((0.5 : 1	(0.5:1) (0.5:1) GGC1(G10 Valve/ Boo	Weight Raw part no.
ITEM 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	PART NO. 10-2533-707 10-1444-803 10-1441-130 10-1442-711 10-1442-711 10-1443-130 10-1443-130 10-1443-130 10-1445-803 10-1445-803 10-1445-803 10-1452-141 10-0005-511 10-1413-141 10-1412-707 10-0128-703 10-1411-803 10-0606-544 10-1448-400 10-1449-400 10-130-703 10-1417-141	BILL OF MATERIA DESCRIPTION GG10 Tail U-Cup Seal GG10 Valve Body GG10 Valve Head Screw GG10 Valve Head Screw GG10 Valve Seat GG10 Valve Stem Guide GG10 Valve Stem Guide GG10 Dash Pot Piston GG10 Dash Pot Piston GG10 Dash Pot Bearing Nyloc Nut - M5 GG10 Split Bearing GG10 Dust Seal GG10 O'ring/Valve Body GG10 Nozzle Body Ball Lock Screw Inlet GG10 Stem Spring - Inner GG10 Stem Spring - Outer GG10 Dash pot GG10 Dash pot GG10 Lever Pad	ALS REQ'D 1	MATERIAL SUPER PU 95 Mild Steel - Plated 316 Stainless Steel Viton GLT 506 316 Stainless Steel Acetal Mild Steel - Plated Anodised Aluminium Acetal L.T. Polyurethane L.T. Nitrile Mold Aluminium 316 Stainless Steel Spring Steel - Plated Spring Steel - Plated L.T. Nitrile Mold Mild Steel - Plated Acetal		Ceneral tolerances: DIN ISO 2768-1 &-2 class mK	Tolerances Date Design 10.04.2014 Verified Norm L.G.Equipment	C-C ((0.5:1 Material Description Grawing-no.	(0.5:1) (0.5:1) GG1(G10 Valve/ Boo	Weight Raw part no. 04 dy Assembly



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10-1463-803

Catalog-rio.		General tolerances: DIN ISO 2768-1 &-2 class mK		Tolerances		Scale 1.5:1 Material		Raw part no.								
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a				Design	14.10.2014	M.Treloar	I STATISTICS	0010								
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										Norm			1.000	Inlet Swivel Assen	el Assembly	
				LGEI L.G.Equipment Pty. Limited			Drawing-no. X1402		B Pa							
ndex Modification Date Name		Name				Repl	superse	superseded by								
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Mild Steel - Plated

GG10 Inlet Swivel - 1"

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с			ITEM 1 2	P/ 10-1465- 10-1466-	ART NO 804 130	BIL	L OF M DE GG10 L GG10 L	1ATER SCRIF .ever .ever F	RIALS PTION Pivot Pin	MATER Anodised Alun 316 Stainless	IAL ninium Steel			с
D	Catalog-no.	Ge DII cla	eneral to N ISO 2 ass mK	Name	Design Verified Norm	Date 14.04.201 L.G.Equipm	Na 4 M.Tr	me eloar Limited	Scale Material Description GG Drawing-no.	105 Lev X140	er As 5 B	Veight taw part no. Semb	Page 1 of	D
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