



## GG50 SERIES GASGUARD NOZZLE

### RECOMMENDED MAINTENANCE & REPAIR PROCEDURES

The following statements on the maintenance and repair of the GasGuard GG50 Series L.P.Gas Nozzle are designed to offer L.G. Equipment's (LGE) authorised international Distributors, O.E.M's & Service Centres recommended methods to bring back into serviceable condition Nozzles which require maintenance or repair.

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

LGE has available a GG53 SEAL KIT for the GG50 Nozzle Series. It contains seal components and wear items for proper service of the GG50 Nozzle. Other components that are worn or damaged should be replaced on a needs basis. Refer to the assembly drawing for component detail and part numbers.

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 GG1E SERIES NOZZLE

The GG50 Series GasGuard Nozzle is available in the following combinations:-

- GG50L – Nozzle with Latch Assembly fitted.
- GG50SL – Nozzle with Strainer and Latch Assembly fitted.

All GasGuard Nozzles are supplied with either a 15mm (1/2"), 20mm. (3/4") N.P.T. internal inlet thread for hose end connection. Nozzles are also available as a "J" version; this includes a magnet in the nozzle body.

The GG50 SL Nozzle Assembly consists of the following Sub-assemblies:

- |  |                          |
|--|--------------------------|
| i) Inlet Swivel Assembly – 1/2" N.P.T. | Part No. LG2 x 15mm. or, |
| Inlet Swivel Assembly – 3/4" N.P.T.    | Part No. LG2 x 20mm,     |
| ii) Nozzle Body Assembly               | Part No. 10-1307-715,    |
| iii) Lever Assembly                    | Part No. GG5,            |
| Lever/Latch Assembly (optional)        | Part No. GG5L            |
| iv) Valve Assembly                     | Part No. GG54,           |
| v) Connector Assembly                  | Part No. GG57,           |
| vi) Strainer (optional)                | Part No. EK172.1         |
| vii) Magnet Assembly (optional)        | Part No. GGJ             |

## B. TOOLS RECOMMENDED FOR SERVICE ON THE GASGUARD NOZZLE

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

- i) Adjustable Spanner (Wrench) – Opening to 38mm (1.50”) across flats,
- ii) Internal Circlip pliers,
- iii) Light ball-peen hammer,
- iv) 3.2mm (1/8”) dia. drift,
- v) Screw driver (medium size),
- vi) Bench vice,
- vii) 2.5 and 3.0mm across flats allen keys,
- viii) Spring clamps (medium size) - two only,
- ix) Sharp Nose Punch,
- x) Drill Bit – 5mm dia.
- xi) Nose Piece Assembly tool (available from L.G.E.)
- xii) Loctite 263 or similar

## C. ASSEMBLY GREASE RECOMMENDED FOR SERVICE ON THE GASGUARD 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. DISASSEMBLY OF GG50 MAJOR SUB-ASSEMBLIES Refer Dwg X1321

### a. GG57 CONNECTOR ASSEMBLY (E) Refer to Dwg. X1313

1. Remove the Slide Sleeve Saddle (#10), by sliding the Saddle over the rear of the Slide Sleeve using screw drivers or similar tools as levers.
2. Remove the Lever Pivot Pin (#3 Dwg. X1300 C), then slide the Connector Assembly from the front of the Nozzle. Remove the Lever Assembly from within the Nozzle Body lever guard and place to the side.
3. Remove Circlip (#5) from its groove located in the rear inside diameter of the Outer Sleeve (#2). Align one of the Circlip ends over the extraction hole in the Outer Sleeve. Using a thin spike, carefully push the Circlip inwards, and then with a small screw driver lift and hold Circlip while rotating the Sleeve to remove the Circlip.
4. The Outer Sleeve (#2) can now be removed from the Slide Sleeve (#1), releasing the Connector Arms (#6) and Connector Spring (#4).
5. Remove the Springs (#4) and (#10) and the six Locking balls (#3).
6. Remove and discard O ring (#9) and remove Circlip (#8) from the internal bore of the Slide Sleeve (#1). This allows access to the GG56 Dual Nose Assembly (#7).
  - (Refer Dwg. No. X1312) Remove GG56 from the GG57 Connector Assembly.
  - Remove Circlip (#7d) and disconnect the Dual Nose Tail (#7a) from the Dual Nose Body (#7c). Also remove the Nose Seal (#7e) and U Cup Seal (#7b) from the Dual Nose Body (#7c).
  - Grease the front, internal Nose Seal recess area of the Nose Body (#7c) with Molycote. Apply the Nose Seal (#7e) to this recess and apply axial pressure to fully seat the Nose Seal in the recess.
  - Lightly coat with Molycote the U-Cup Seal (#7b) and fit to the other end of the Nose Body (#7c), ensuring that it is correctly orientated.
  - Assemble the Dual Nose Body (#7c) to the Dual Nose Tail (#7a). Apply Molycote to the inside wall of the Tail, carefully twist while pushing the Dual Nose Body and U-cup Seal into the Dual Nose Tail (#7a). Fit Circlip (#7d) into its internal groove in the Dual Nose Tail (#7a). Ensure that the Circlip clicks into the groove and there is free sliding/axial movement between the Tail and Body of approximately 3mm.
  - The GG56 Dual Nose Assembly is now ready to be fitted to the GG57 Connector.
7. Clean both Nose Body (#7c) and Nose Tail (#7a) and check for any wear or adverse marks on both items. Replace if damaged or worn.

8. Clean the slide Sleeve (#1), Outer Sleeve (#7), Arms (#6) and the Locking Balls. Inspect for cracks, distortion of locking ball holes and wear in Slide Sleeve (#1).
9. Inspect for wear or damage to ball groove and arm slots of the Outer Sleeve (#2). Check for distortion of locking balls. If there is excessive wear, replace with new components.
10. To re-assemble the GG57 Connector, fit O'ring (#9) to inside groove of slide Sleeve (#1). Thinly grease the outside diameter of the GG56 Dual Nose Assembly (#7) with NULON. Fit to the Slide Sleeve (#1) and ensure that it slides freely past the O ring (#9) and in the bore of the Slide Sleeve.
  - Fit the Circlip (#8) into its groove in the Slide Sleeve (#1) **NOTE: Circlip (#8) restrains the Dual Nose Assembly within the Slide Sleeve. It is imperative that the circlip is firmly locked in the circlip groove of the Slide sleeve.**
  - Lightly grease the Lock-out Ball holes in the Slide Sleeve (#1), and fit the six (6) Balls(#3).
  - Loosely place Circlip (#5) over the Slide Sleeve. This will be used later to lock in the Outer Sleeve.
  - Fit Connector Spring (#4) onto Slide Sleeve (#1) ensuring that the Spring sits neatly against the external shoulder of the Slide Sleeve. Ensure that squared spring end of the Connector Spring (#4) is fitted to the shoulder within the Outer Sleeve (#2).
  - Fit Outer Sleeve (#2) over Slide Sleeve(#1) and spring, ensuring there is free movement of Outer Sleeve over the Slide Sleeve and Lock-out Balls.
  - Fit the 4 Connector Arms (#6) into the Outer Sleeve (#2) while pressing and releasing the Outer Sleeve. Ensure that there is free movement of the four Connector Arms when the Outer Sleeve moves over the Slide Sleeve. Check that the Connector Arms rock evenly about their pivot points. The Connector Arms must sit flush with the leading face of the Outer Sleeve when in an unactuated mode.
  - Secure the Outer Sleeve by fitting Circlip (#5) into the internal groove of the Outer Sleeve (#2). Press the Slide Sleeve into the Assembly while working the Circlip into position. An end of the Circlip should be within 10mm of the spike hole to allow for easy removal.
  - Fit tapered Spring (#10) into bore of Slide Sleeve with its larger diameter end addressing the internal step of the Slide Sleeve (#1). Push Slide Sleeve into the Assembly to allow retraction of the six balls when fitting the Spring.
  - The GG57 Connector Assembly is now ready to be assembled to the Nozzle Body (#B) and Main Valve Assembly (#D).

**NOTE: The tapered Spring (#10) will be fitted during final assembly. The Slide Sleeve Saddle (#11) will be fitted after complete nozzle is assembled and tested.**

**b. LG2 INLET SWIVEL ASSEMBLY (A) - Refer to Dwg. X0776 A**

1. Remove the Locking Screw (#2) from the Nozzle Body Assembly (Dwg. X1307). Fit the Inlet Swivel flats of the Internal Swivel Body (#1 on Dwg. X0776 A) in a vice, and rotate the Nozzle Body anti-clockwise using a suitable spanner or adjustable wrench.
2. Holding the Inlet Swivel Assembly with the Ball Race Plug (#9) on the underside, give the Swivel a sharp tap on a hard surface to dislodge the Ball Plug. Having removed the Ball Plug, place the Internal Swivel Body (# 1) flats between a vice, with Ball plug hole facing down. Remove the Ball Bearings (#3) by counter-rotation and if necessary apply solvent to remove grease. Pull apart the Internal Swivel Body (#1) and External Swivel Bodies (# 2a,b & c).
3. Remove and discard all seals and back-up rings.
4. Clean all parts in mild solvent and dry. Check the swivel section of both swivel bodies for clean, mark-free surfaces or wear in the bearing groves and for unbroken plating. Replace components if required.
5. Assemble one of the two (2) Main Seal O Rings (#6) to the centre internal shoulder of the Internal Swivel Body (#1). Assemble the concave surface of the Back-up Ring (#7) to the forward surface of this O ring. Fit the second O ring (#6) to the front O ring internal groove of the Internal Swivel Body.
6. Assemble the O ring Dust Seal (#8) to the rear shoulder of the External Swivel Body (#2).
7. Apply Aeroshell Grease to mating surfaces and with an easy twisting and forward thrusting motion, insert the External Swivel Body (#2) to the Internal Swivel Body (#1).
8. Place this Assembly in a vice, with the Ball Race groove hole facing upward. Assemble the first of the 13 only Ball Bearings (#3) through this hole using a slight axial pressure between the two Swivel Bodies. Rotate the External Swivel Body to facilitate the Ball Bearing entry and thereafter the remaining 12 Balls can be inserted during a slow rotation of the External Swivel Body.
9. Fit the Ball Race Plug (#9) to the hole with its extraction hole facing outward. A little grease in the ball plug hole will prevent the Plug from falling out when handling this Inlet Swivel Assembly.

**c. Nozzle Body Assembly - refer Dwg No. X1314**

1. This Assembly requires little or no maintenance, excepting close inspection to ensure all threads are in good condition for assembly of the Inlet Swivel Assembly and Valve Assembly. Cleaning and thread greasing is normally sufficient for this Assembly. Ensure that the Nozzle Body is not distorted and the Comfigrip (#2) and Lever Latch Pin (#4) are correctly fitted. If being replaced, the pin should be ground flush with the pin supports on the body.

#### d. GG54 Valve Assembly – refer Dwg. No. X1311

##### Disassembly of Valve

1. Remove Circlip (#8), followed by the Valve Spring Guide (#7) and Ball Valve/Spring Assembly (#6).
2. Holding this Valve Assembly in a vice by its spanner flats, unscrew and remove the U-cup Housing (#2) by the use of a “pin” wrench, using the holes in the front face of the U-cup Housing. Discard the U-cup Seal (#5), Valve Seat (#3) and U-cup Housing O ring (#4).
3. Check the condition of the face of the Ball Valve, and if scored or damaged, replace the Ball Valve & Spring Assembly (#6). Check and clean all other components. Ensure the U-cup Seal groove in the housing (#2) is clean and smooth.
4. Valve Seat, U-cup Housing O’ring, U-cup Seal and Valve Body O ring are available from the **GG53 Seal Kit**. These should all be replaced at each service. Other items will only be replaced if worn or damaged.
5. Assemble U-cup Seal (#5), to U-cup Seal Housing (#2). Fit the Valve Seat (#3) and then Housing O ring (#4)) using a dab of grease to hold seat in place.
6. Lightly grease the thread of the cleaned Valve Body (#1). Fully screw this assembled U-cup Seal Housing using a “pin” wrench. The U-cup Housing should be flush with the top of the Valve body for correct Valve seat compression. Over tightening could damage the Valve seat and reduce flow rate of assembled nozzle.
7. Invert the Valve body and place Ball Valve & Spring Assembly (#6) centrally onto Valve Seat (#3). Fit Valve Spring Guide (#7) onto the spring. Press the Valve Guide to expose the groove and fit the Circlip (#8). Ensure Circlip (#8) is correctly fitted and secure in the groove. Check spring action.
8. Fit Valve /Nozzle Body O’ring (#9) into its groove behind the external thread of the Valve Body (#1). The GG54 Valve Assembly is now ready to be assembled into the GG50 Nozzle Body Assembly

#### e. LEVER ASSEMBLY (C) refer Dwg. No. X1300

1. This Assembly is normally in a satisfactory condition to be reused in a maintenance program. However, check for damage or wear and replace if necessary.
2. Check the Slippers (#2) for excessive wear on their faces to the Nozzle Body. If there is wear, replace the Slippers – 2 off.

3. If a Latch (#4) is fitted, check that its Latch Spring (#6) operates freely with the Latch. Ensure that the Latch has not been damaged or badly worn at the Latch Pivot Pin or contact point with Body Latch Pin. If damage or wear is evident then replace the complete Lever Assembly.

**f. STRAINER ASSEMBLY – Dwg. No. EK172.1**

1. This Strainer Assembly, if originally fitted, should be cleaned. If there is damage to the mesh or the ring seal, replace with a new strainer.

## E. ASSEMBLY OF THE GG50 GASGUARD NOZZLE – refer to Dwg. No. X1321

1. After maintenance of each Sub-assembly of the GG50 Nozzle, reassemble as a full Nozzle by fitting the Nozzle Body/Swivel O Ring and Back Up Ring (#5 & #4 of Dwg X0776 A) into Nozzle Body. Place the Inlet Swivel Assembly (A) in a vice. Apply grease to the external diameters and external thread of the Internal Swivel Body (#1).
2. Screw the Nozzle Body Assembly (B) to the Inlet Swivel Assembly firmly. Secure with the Locking Screw (#3 of Dwg X0776 A) to the Nozzle Body with an Allen Key.
3. Check the Swivel Assembly rotates relative to the Nozzle Body. This rotational torque may be high initially, but it will loosen up with use.
4. Grease thread of Valve Assembly (D). Check O ring is fitted and if required, fit the EK172.1 Strainer (F). Holding the Valve Body flats in a vice, screw the Nozzle Body onto the Valve Assembly. Check O ring is fully contained in its groove.

**Note: With the Inlet Swivel and Valve assembly fitted, LGE recommend that a hydrostatic pressure test is carried out, to ensure assembly holds pressure without leaking. Refer to Nozzle Test Procedure on page 8 for more details.**

5. Take the tapered Spring (#10 – Dwg X1313) and fit smaller end over the Valve Assembly (D) to rest on the shoulder. Grease as required.
6. Fit the Lever Assembly to the Nozzle Body; ensure that Lever is correctly aligned on Body and Body Lever Guard Web. Fit Lever Slippers (#2 - Dwg X1300) to Lever Assembly. Ensure that the orientation of slippers is correct.
7. Holding the Body and Lever, slide the Valve Assembly into the connector until the Lever Pivot Pin holes on the Lever and Connector Slide Sleeve, align. The Slide Sleeve must be fully pushed into Outer Sleeve to allow the spring to pass over the Lock Out Balls.
8. Fit the Lever Pivot Pin (#3) – Dwg. X1300. Push this Lever Pivot Pin home fully.

**Note: The Nozzle should be tested in an appropriate manner to confirm correct operation and performance prior to installation in the field, before fitting the Connector Saddle (#11 – Dwg. X1313) and allowing use of the Nozzle. Refer to Nozzle Test Procedure – Over-Leaf for more details**



## F. GG50 NOZZLE TEST PROCEDURE

### STATIC TEST:

- 1) LGE recommends two (2) series of tests be carried out, i) **static** and ii) **dynamic** flow test. It is recommended that the Nozzle be flow and pressure tested using LPGas (propane) as the testing medium at the normal flow pressures of 1600-2000 kPa (230-290 p.s.i.) experienced in the field. If LPGas (propane) is not available, a satisfactory substitute testing medium is bottle nitrogen set on its regulator at 1800 kPa.
- 2) With the **static test**, the Nozzle (**Note: Static test may be carried out prior to fitting Lever (C) and Connector (E)**) is connected to the supply hose, essentially fitted with an isolating valve immediately upstream of the hose end connection to the Nozzle. Apply L.P.Gas pressure from the pressure unit at the above stated flow pressures, and slowly open the isolating valve.
- 3) With the Nozzle closed, check gas pressure security at all joints on the Nozzle especially at the Inlet Swivel connection to the Nozzle. Carry out this test by immersing the Nozzle Assembly in a container of detergent loaded water. Whilst checking pressure security, apply a bending moment to the Inlet Swivel of approx. 27Nm (20 foot pounds) whilst rotating the Swivel Assembly slowly.
- 4) To confirm Connector and Lever operation, without allowing gas into the Nozzle, connect the Nozzle Assembly via its Connector Arms to an approved (vehicle) Adaptor, and check that the Nozzle locks firmly onto the Adaptor when the Lever is fully operated. If firm locking takes place, it can be assumed that the Valve of the Nozzle has opened and would allow L.P.Gas to pass through same during normal pump operation.
- 5) Check Lever movement and where fitted that the Latch engages when the Lever is pulled back and allowed to rest open. Disengage the Latch by pulling back on the Lever and releasing to return Lever to the closed position.

### DYNAMIC FLOW TEST:

- 6) For a dynamic flow test, connect the Nozzle to a vehicle connector fitted with a down-stream choked outlet, piped away to a receiving tank or safe outlet to atmosphere. Allow gas into the Nozzle and check for gas vapour while valve is closed.
- 7) Activate Lever to allow gas flow. Check for leaks from the Connector sides. On releasing the Lever check that there is a small amount of gas caused to escape to atmosphere.
- 8) At the conclusion of satisfactory static and dynamic tests, close the hose end isolating valve, operate the Lever to depressurise the Nozzle and remove the Nozzle from the supply hose. Fit the available Connector Saddle (#11 on Dwg. No. X1313) to the Slide Sleeve of the Connector Assembly.

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

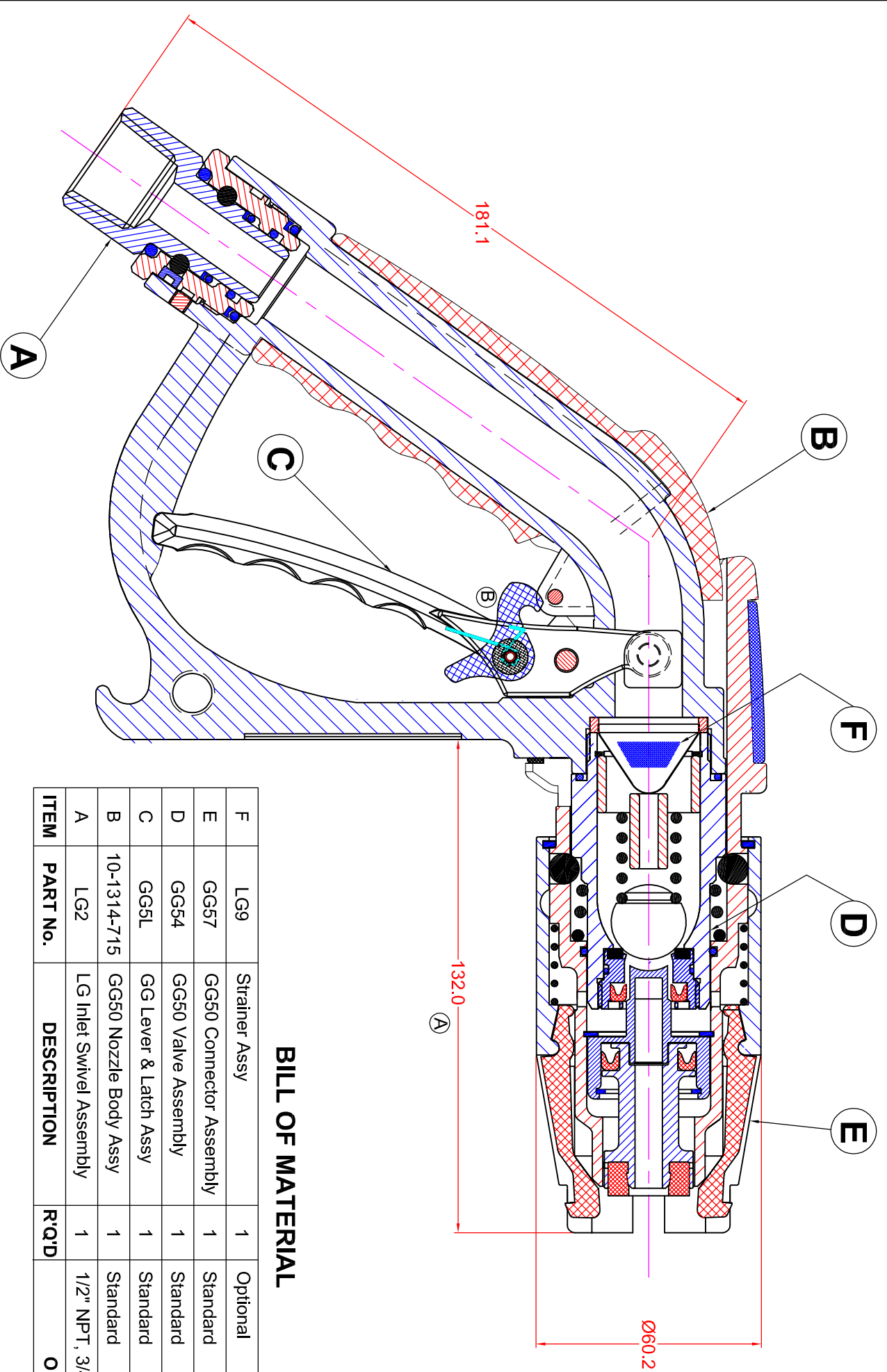
IF YOU FIND THAT THERE ARE OPERATING FEATURE FOR WHICH YOU DRAW CONCERN, LGE RECOMMENDS THAT YOU CONTACT ITS DISTRIBUTOR OR HEAD OFFICE FOR ASSISTANCE.

**Prepared By:**

**L.G. Equipment Pty. Ltd**

*a division of ELAFLEX HIBY GmbH & Co. KG*  
Unit 29/58 Box Road, Taren Point, NSW, 2229



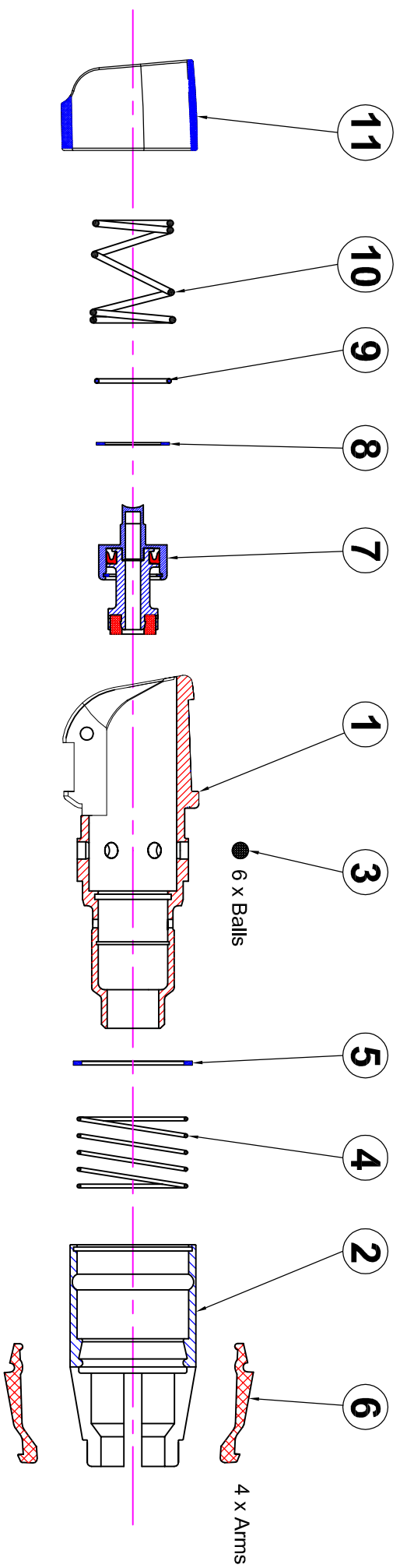


### BILL OF MATERIAL

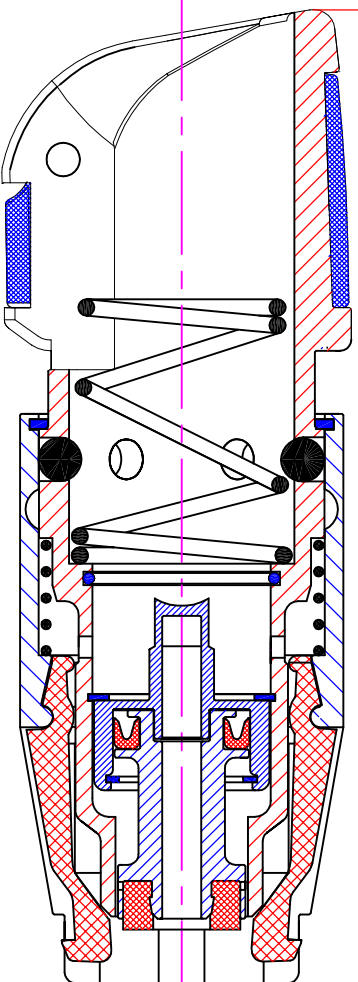
| ITEM | PART No.    | DESCRIPTION              | R'Q'D | OPTIONS                       |
|------|-------------|--------------------------|-------|-------------------------------|
| F    | LG9         | Strainer Assy            | 1     | Optional                      |
| E    | GG57        | GG50 Connector Assembly  | 1     | Standard                      |
| D    | GG54        | GG50 Valve Assembly      | 1     | Standard                      |
| C    | GG5L        | GG Lever & Latch Assy    | 1     | Standard                      |
| B    | 10-1314-715 | GG50 Nozzle Body Assy    | 1     | Standard                      |
| A    | LG2         | LG Inlet Swivel Assembly | 1     | 1/2" NPT, 3/4" NPT or 1" BSPG |

|      |   |       |     |          |
|------|---|-------|-----|----------|
| B    | Lever Latch was moulding                                | PGS   | PT  | 29-10-07 |
| A    | Connector mod. (outer sleeve and nose). Proj. was 129mm | PGS   | PT  | 01-06-07 |
| Orig | Original with Latch R1109-A                             | JT/PS | PT  | 29-08-06 |
| Rev  | <b>Change Detail</b>                                    | Drw   | Ckd | Date     |

|  |                    |   |                                  |                            |  |
|--|--------------------|---|----------------------------------|----------------------------|--|
| GG50(S)L   |                    | GG50(S)L Nozzle Assembly                            |                                  | See Bill of Material above |  |
| <b>Part No.</b>  | <b>Description</b> | <b>Material</b>                                     | <b>Finish</b>                    |                            |  |
|  | GG50 NOZZLE        | GG50(S)L NOZZLE Assembly                            |                                  |                            |  |
| <small>PROPRIETARY: This document and its contents may not be used or reproduced in any manner without the written authorisation of L.G.EQUIPMENT Pty. Limited</small> |                    | <small>Drawn Scale</small> 1:1<br><small>A3</small> | <small>Drawing No.</small> X1321 | <small>Revision</small> B  |  |
| <b>GASGUARD</b><br><b>L.G.EQUIPMENT PTY.LTD.</b><br>SYDNEY, N.S.W. AUSTRALIA<br>ABN 70 003 275 250   |                    |   |                                  |                            |  |




180.7



**FULL ASSEMBLY**  
Scale 1:1 (A3)

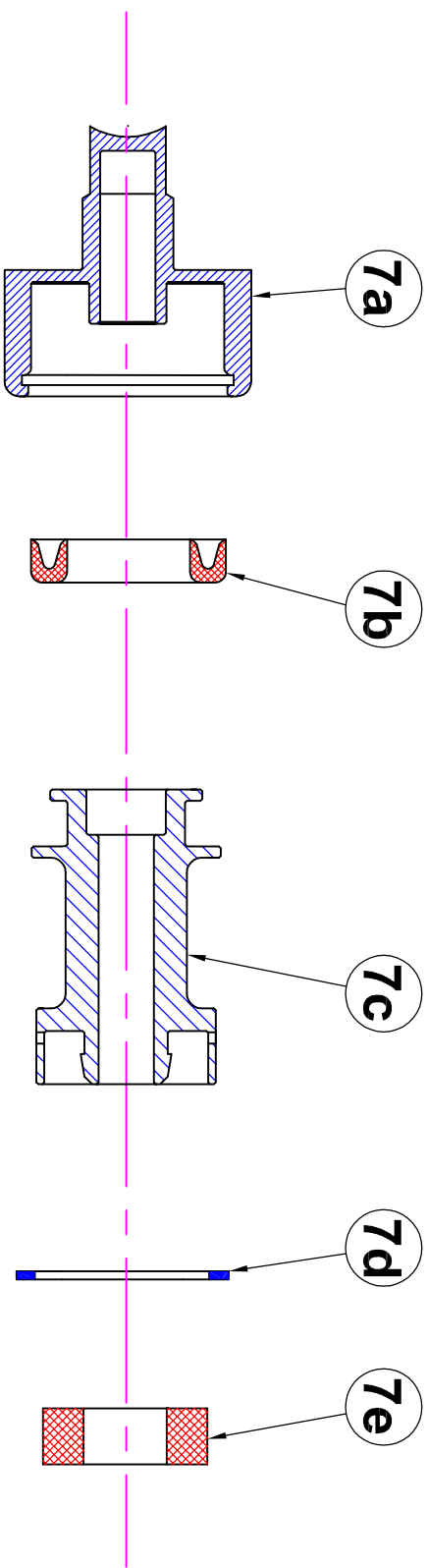
| ITEM | PART No.    | DESCRIPTION               | R/Q'D | MATERIAL                   |
|------|-------------|---------------------------|-------|----------------------------|
| 11   | 10-1112-720 | GG Slide Sleeve Saddle    | 1     | Thermosetting Moulding     |
| 10   | 10-0402-400 | LG50 Valve - S/slv Spring | 1     | Spring Steel - Plated      |
| 9    | 10-0124-703 | O-ring                    | 1     | L.T. Nitrile Moulding      |
| 8    | 10-1155-541 | GG50 Slide Sleeve Circlip | 1     | Spring Steel               |
| 7    | GG56        | GG50 Dual Nose Assy       | 1     | Refer DWG X1312            |
| 6    | 10-1009-804 | LG50 Connector Arm (set)  | 4     | Stainless Steel Casting    |
| 5    | 10-1089-541 | LG50 Connector Circlip    | 1     | Spring Steel               |
| 4    | 10-1046-400 | LG50 Connector Spring     | 1     | Stainless Steel            |
| 3    | 10-0800-602 | LG50 Lock-out Ball (set)  | 6     | Stainless Steel            |
| 2    | 10-1010-803 | GG50 Outer Sleeve         | 1     | Alum Alloy - Hard Anodised |
| 1    | 10-1144-804 | GG50 Slide Sleeve         | 1     | Alum Alloy - Hard Anodised |

|      |  |       |     |          |
|------|--|-------|-----|----------|
| A    | Outer Sleeve (1010) longer, Nose Assy (GG56) shorter | PGS   | PT  | 01-06-07 |
| Orig | Original   | JT/PS | PT  | 10-08-06 |
| Rev  | Change Detail  | Drw   | Ckd | Date     |

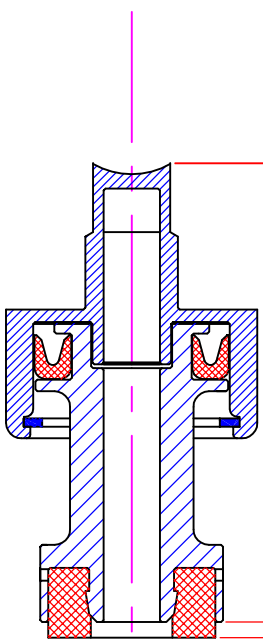
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| Part No.   | GG57                 | Description  | GG57 Connector Assembly |
| Material   | See Bill of Material | Finish   |                         |
| Material   | CONNECTOR ASSEMBLY   | Finish   |                         |
| Material   | X1313                | Revision   | A                       |

**L.G.EQUIPMENT PTY.LTD.**  
SYDNEY, N.S.W. AUSTRALIA  
ABN 70 003 275 250

Drawing No. X1313  
Revision A



When properly fitted,  
Nose Seal will extend  
approx 2mm from the  
Dual Nose Piece



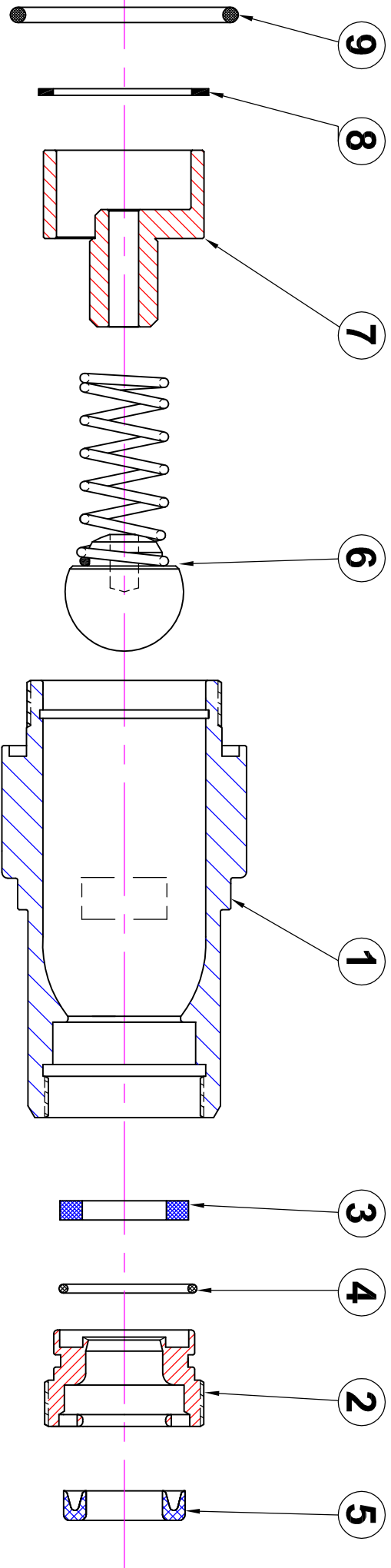
**FULL ASSEMBLY**

**BILL OF MATERIAL**

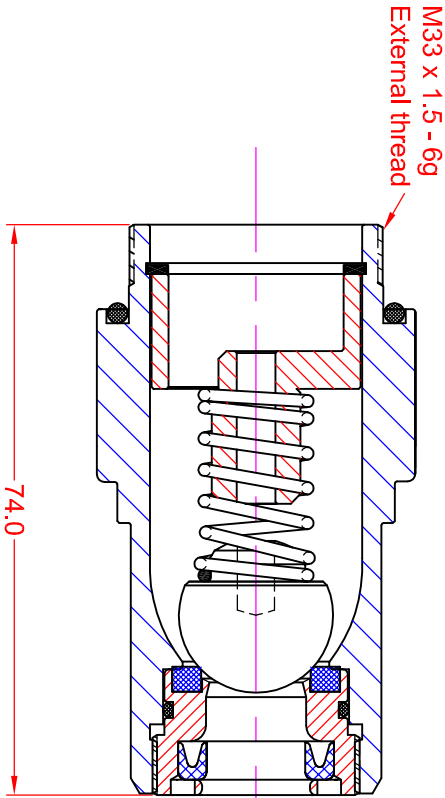
|             |                 |                     |              |                            |
|-------------|-----------------|---------------------|--------------|----------------------------|
| 7e          | 10-1003-708     | LG50 Nose Seal      | 1            | Polyurethane Moulding      |
| 7d          | 10-1158-541     | GG50 Nose Circclip  | 1            | Spring Steel               |
| 7c          | 10-1126-804     | GG50 Dual Nose Body | 1            | Alum Alloy - Hard Anodised |
| 7b          | 10-PM50-705     | LG1 U-cup Seal      | 1            | Polyurethane Moulding      |
| 7a          | 10-1125-804     | GG50 Dual Nose Tail | 1            | Alum Alloy - Hard Anodised |
| <b>ITEM</b> | <b>PART No.</b> | <b>DESCRIPTION</b>  | <b>R'Q'D</b> | <b>MATERIAL</b>            |

|      |                                 |       |     |          |
|------|---------------------------------|-------|-----|----------|
| A    | Dual Nose Body (1126) shortened | PGS   | PT  | 01-06-07 |
| Orig | Original                        | JT/PS | PT  | 09-08-06 |
| Rev  | Change Detail                   | Drw   | Ckd | Date     |

|   |      |   |                           |                 |               |
|---|------|---|---------------------------|-----------------|---------------|
| <b>Item</b>   | GG56 | GG50 Dual Nose Assy   | See Bill of Material      | <b>Material</b> | <b>Finish</b> |
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| <b>L.G.EQUIPMENT PTY.LTD.</b><br>SYDNEY, N.S.W. AUSTRALIA<br>ABN 70 003 275 250 |      | <b>GG50 Nozzle</b><br>Drawn Scale 1:1 A4  | <b>DUAL NOSE ASSEMBLY</b> |                 |               |
|   |      | <b>X1312</b>  |                           | <b>A</b>        |               |
|   |      | Drawing No.   |                           | Revision        |               |



**FULL ASSEMBLY**

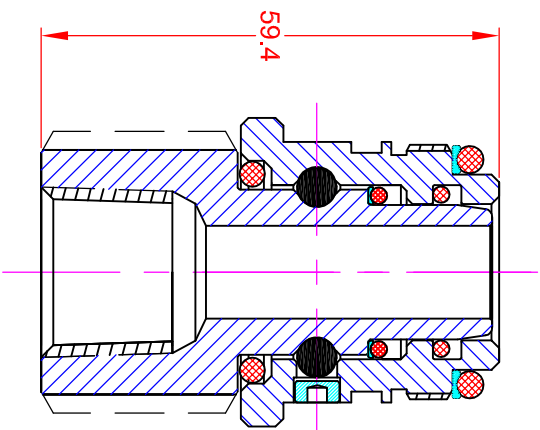
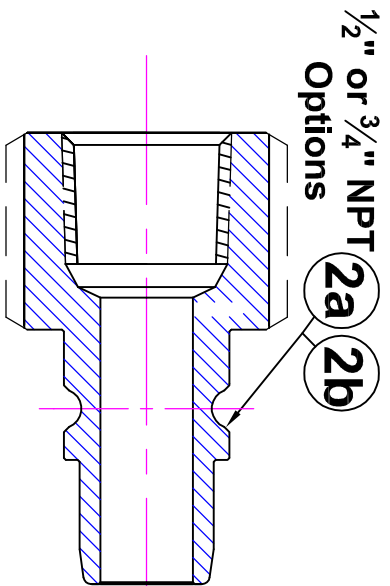


**BILL OF MATERIALS**

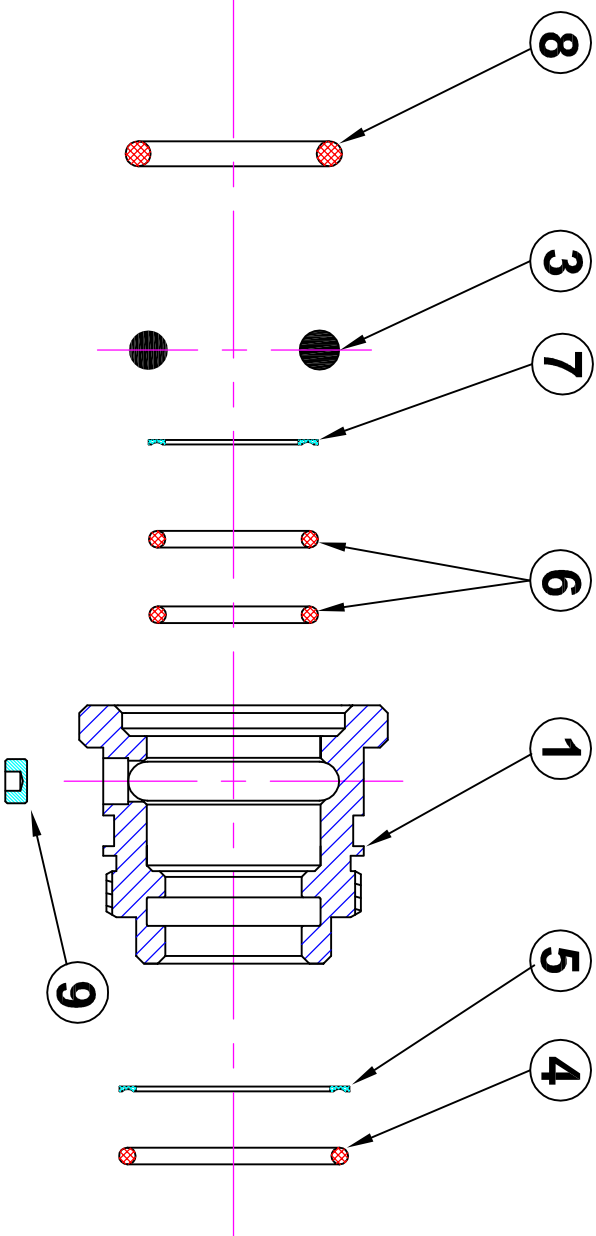
|             |                 |                              |              |                                 |
|-------------|-----------------|------------------------------|--------------|---------------------------------|
| 9           | 10-0124-703     | O-ring - Valve-Noz Body Seal | 1            | Low Temp Nitrile moulding       |
| 8           | 10-0127-541     | Spring Guide Circlip         | 1            | Spring steel                    |
| 7           | 10-0835-141     | Valve Spring Guide           | 1            | Resin Moulding                  |
| 6           | 10-0758-804     | Ball Valve & Spring Assy     | 1            | Stainless St Ball & Pltd Spring |
| 5           | 10-1220-705     | GG U-cup Seal                | 1            | Polyurethane Moulding           |
| 4           | 10-0020-703     | O-ring - U-cup Housing       | 1            | Low Temp Nitrile moulding       |
| 3           | 10-1157-709     | GG50 Valve Seat              | 1            | Polyurethane Moulding           |
| 2           | 10-1123-110     | GG50 U-cup Housing           | 1            | Brass Rod                       |
| 1           | 10-1124-803     | GG50 Valve Body              | 1            | Mild Steel - Plated             |
| <b>ITEM</b> | <b>PART NO.</b> | <b>DESCRIPTION</b>           | <b>R'Q'D</b> | <b>MATERIAL</b>                 |

|      |                        |       |     |          |
|------|------------------------|-------|-----|----------|
| A    | Items 2, 6 & 7 updated | PGS   | PT  | 11-02-10 |
| Orig | Original               | JT/PS | PT  | 09-08-06 |
| Rev  | Change Detail          | Drw   | Ckd | Date     |

|                 |      |   |                           |  |               |
|-----------------|------|---|---------------------------|--|---------------|
| <b>Item</b>     | GG54 | GG50 Valve Assy   | Refer to Bill of Material | <b>Material</b>                          | <b>Finish</b> |
| <b>Part No.</b> |      | <b>Description</b>  |                           | <b>Material</b>                          |               |
|                 |      | <small>PROPRIETARY: This document and its contents may not be used or reproduced in any manner without the written authorisation of L.G.EQUIPMENT Pty Limited</small> |                           | <b>GG50 Nozzle</b><br>Drawn Scale 1:1 A4 |               |
| <b>GASGUARD</b> |      | <b>L.G.EQUIPMENT PTY.LTD.</b>   |                           | <b>VALVE ASSEMBLY</b>                    |               |
|                 |      | SYDNEY, N.S.W. AUSTRALIA<br>ABN 70 003 275 250  |                           | <b>X1311</b><br>Drawing No.              |               |
|                 |      |   |                           | <b>A</b>                                 |               |
|                 |      |   |                           | Revision                                 |               |



FULL  
ASSEMBLY



**BILL OF MATERIAL**

|             |                 |                                  |              |                           |
|-------------|-----------------|----------------------------------|--------------|---------------------------|
| 9           | 10-0702-130     | Inlet Swivel Ball Race Plug      | 1            | Stainless Steel           |
| 8           | 10-0212-703     | O-ring Dust Seal                 | 1            | Low Temp Nitrile Moulding |
| 7           | 10-B115-701     | Back-up Ring - Main Seal         | 1            | Nitrile Moulding          |
| 6           | 10-0317-703     | O-ring Main Seal                 | 2            | Low Temp Nitrile Moulding |
| 5           | 10-B214-701     | Back-up Ring Body-Swivel Seal    | 1            | Nitrile Moulding          |
| 4           | 10-0214-703     | O-ring Body-Swivel Seal          | 1            | Low Temp Nitrile Moulding |
| 3           | 10-0500-601     | Inlet Swivel Ball Bearings (set) | 13           | Stainless Steel           |
| 2b          | 10-0818-803     | External Swivel 3/4" NPT         | 1            | Mild Steel - Plated       |
| 2a          | 10-0780-803     | External Swivel 1/2" NPT         | 1            | Mild Steel - Plated       |
| 1           | 10-0781-803     | Internal Inlet Swivel Body       | 1            | Mild Steel - Plated       |
| <b>ITEM</b> | <b>PART No.</b> | <b>DESCRIPTION</b>               | <b>Req'd</b> | <b>MATERIAL</b>           |

| Item | Part No.   | Description                      | Material                  | Finish |
|------|------------|----------------------------------|---------------------------|--------|
| 2b   | LG2 x 20mm | LG2 Inlet Swivel Assy - 3/4" NPT | Refer to Bill of Material |        |
| 2a   | LG2 x 15mm | LG2 Inlet Swivel Assy - 1/2" NPT | Refer to Bill of Material |        |



**GASGUARD**

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**LG NOZZLE**

Drawn Scale 1:1 A4

**L.G.EQUIPMENT PTY.LTD.**

**SYDNEY, N.S.W. AUSTRALIA**

ABN 70 003 275 250

**LG2 INLET SWIVEL ASSY**

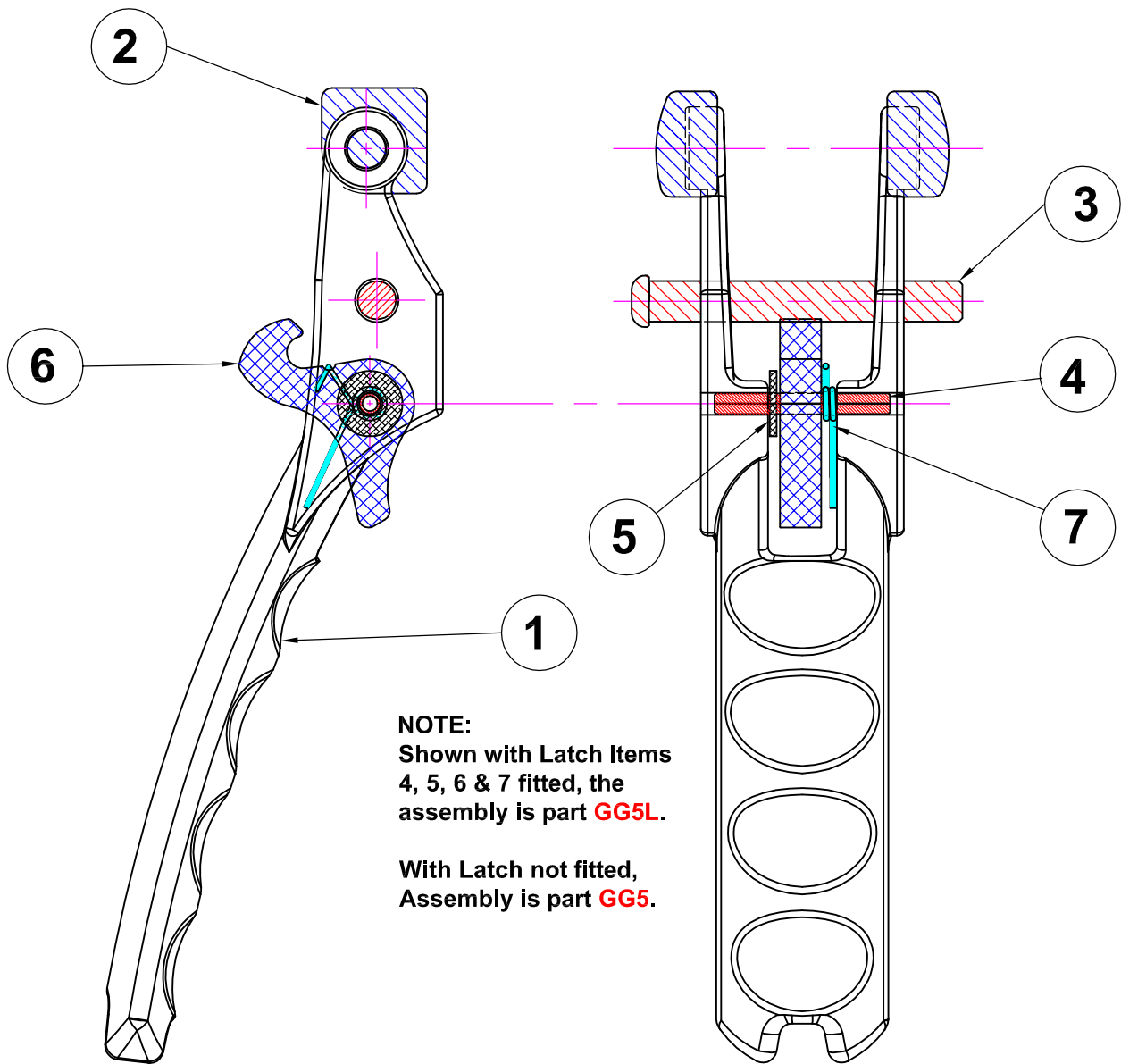
**X0776**

**A**

Drawing No.

Revision

|      |  |     |     |          |
|------|--|-----|-----|----------|
| A    | Upgraded for Rev M Internal & External | PGS | PT  | 17-04-08 |
| Orig | Original - For UL GG submission        | PGS | PGS | 10-04-07 |
| Rev  | Change Detail                          | Drw | Ckd | Date     |



**NOTE:**  
 Shown with Latch Items  
 4, 5, 6 & 7 fitted, the  
 assembly is part **GG5L**.  
 With Latch not fitted,  
 Assembly is part **GG5**.

**BILL OF MATERIAL**

|             |                 |                     |              |                            |
|-------------|-----------------|---------------------|--------------|----------------------------|
| 7           | 10-1113-402     | GG Latch Spring     | 1            | Stainless Steel Wire       |
| 6           | 10-1111-803     | GG Latch - Metal    | 1            | Aluminium                  |
| 5           | 10-1121-540     | GG Latch Spacer     | 1            | Plated Steel               |
| 4           | 10-1114-402     | GG Latch Pivot Pin  | 1            | Stainless Steel Spring Pin |
| 3           | 10-1118-130     | GG Lever Pivot Pin  | 1            | Stainless Steel 303/304    |
| 2           | 10-0917-141     | Lever Slipper (set) | 2            | Resin Moulding             |
| 1           | 10-1110-720     | GG Lever - Black    | 1            | Thermoset Moulding         |
| <b>ITEM</b> | <b>PART NO.</b> | <b>DESCRIPTION</b>  | <b>R'Q'D</b> | <b>MATERIAL</b>            |

|            |  |            |            |             |
|------------|--|------------|------------|-------------|
| C          | Latch was R1109 (Moulding), Spacer added | PGS        | PNT        | 16-10-07    |
| B          | Boss added to latch - Ref R1109 B        | PGS        | PNT        | 14-02-07    |
| A          | Profile of latch changed - Ref R1109 A   | PGS        | PNT        | 29-08-06    |
| Orig       | Original                                 | JT/PS      | PNT        | 09-08-06    |
| <b>Rev</b> | <b>Change Detail</b>                     | <b>Drw</b> | <b>Ckd</b> | <b>Date</b> |

|             |                 |                       |                                    |               |
|-------------|-----------------|-----------------------|------------------------------------|---------------|
|             | GG5             | GG Lever Assy         | See Bill of Material & NOTE above. |               |
|             | GG5L            | GG Lever & Latch Assy | See Bill of Material & NOTE above. |               |
| <b>Item</b> | <b>Part No.</b> | <b>Description</b>    | <b>Material</b>                    | <b>Finish</b> |

|  |   |  |            |                  |  |                                    |  |
|--|---|--|------------|------------------|--|------------------------------------|--|
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|  | <b>Drawn Scale</b>  |  | <b>1:1</b> | <b>A4</b>        |  |                                    |  |
|  | <b>L.G.EQUIPMENT PTY.LTD.</b><br><b>SYDNEY, N.S.W. AUSTRALIA</b><br><small>ABN 70 003 275 250</small>   |  |            |                  |  | <b>X1300</b><br><b>Drawing No.</b> |  |