ALH SYSTEMS LTD

CAMERA INSERTION OPERATING MANUAL AND PARTS LIST

ISSUE DATE - 06/01/2015

CONTENTS PAGE

CAMERA INSERTION - STEP 1	PAGE 1
CAMERA INSERTION - STEP 2	PAGE 2
CAMERA INSERTION - STEP 3	PAGE 3
CAMERA INSERTION - STEP 4	PAGE 4
CAMERA INSERTION - STEP 5	PAGE 5
ALH CAMERA INSERTION - PARTS LIST	PAGE 6
ALH CAMERA INSERTION - PARTS LIST	PAGE 7
CAMERA INSERTION WASK VALVE- PARTS LIST	PAGE 8
CAMERA INSERTION WASK VALVE- PARTS LIST	PAGE 9
CAMERA INSERTION END ENTRY - PARTS LIST	PAGE 10
SEAL SET - PARTS LIST	PAGE 11

ALH SYSTEMS LIMITED
1 KINGDOM AVENUE
NORTHACRE INDUSTRIAL PARK
WESTBURY, WILTS. BA13 4WE

TEL: +44 (0)1373 858234

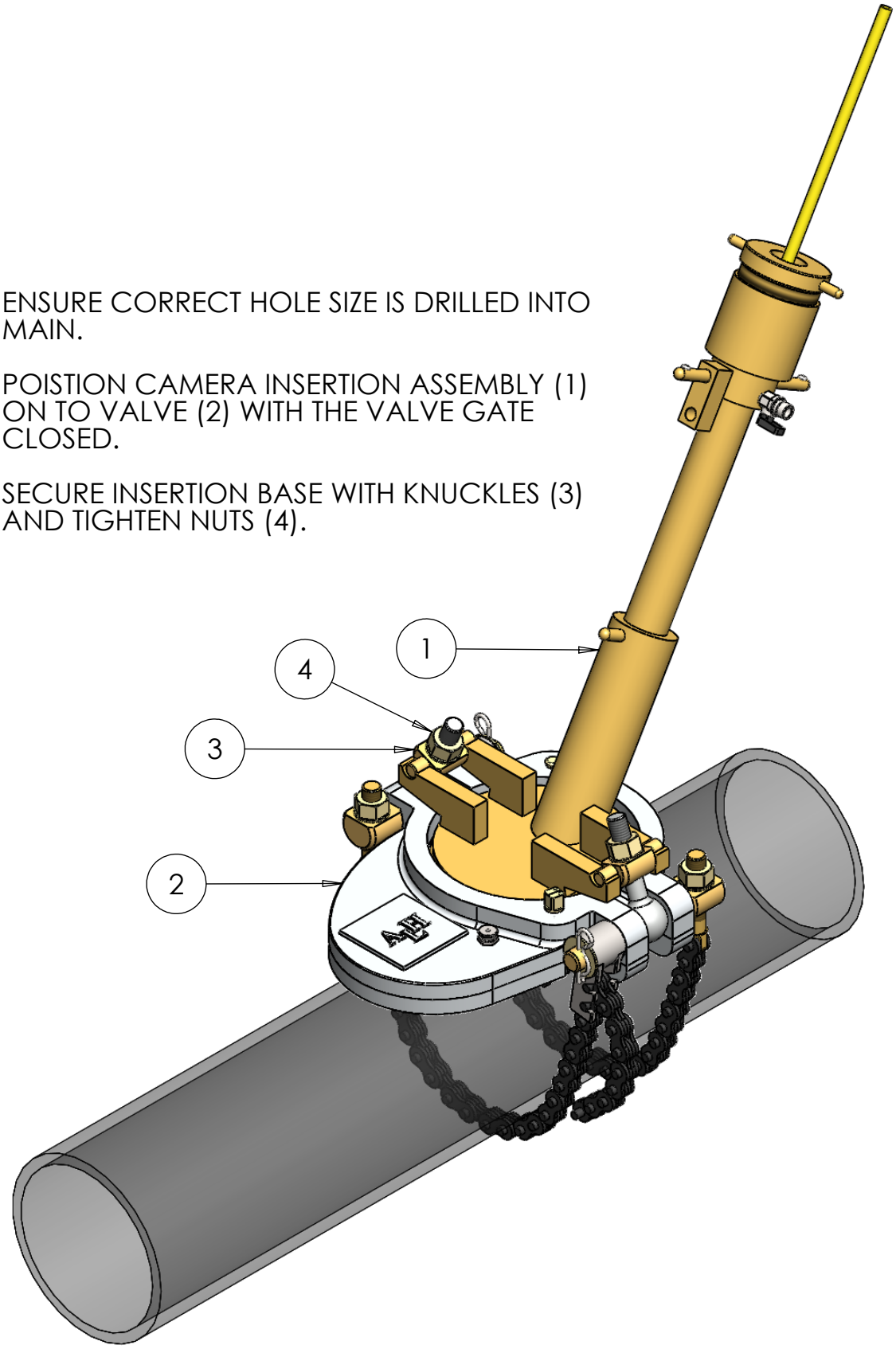
E-MAIL: sales@alh-systems.co.uk

STEP 1

1. ENSURE CORRECT HOLE SIZE IS DRILLED INTO MAIN.

2. POISTION CAMERA INSERTION ASSEMBLY (1) ON TO VALVE (2) WITH THE VALVE GATE CLOSED.

3. SECURE INSERTION BASE WITH KNUCKLES (3) AND TIGHTEN NUTS (4).



ALH SYSTEMS LIMITED
1 KINGDOM AVENUE
NORTHACRE INDUSTRIAL PARK
WESTBURY, WILTS. BA13 4WE

TEL: +44 (0)1373 858234

E-MAIL: sales@alh-systems.co.uk

STEP 2

1. UNSCREW CAP (1) AND INSERT CAMERA THROUGH.

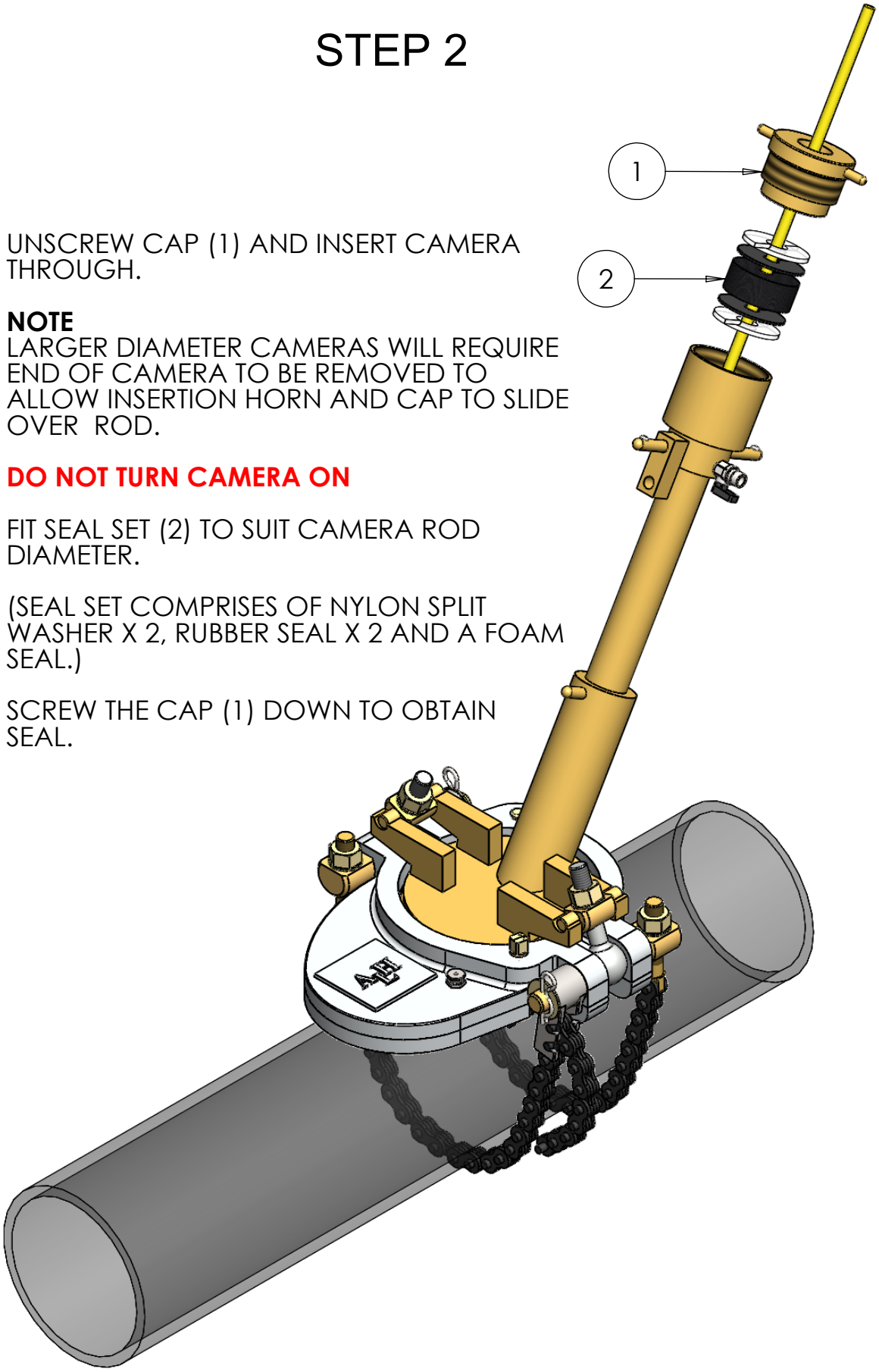
   NOTE
   LARGER DIAMETER CAMERAS WILL REQUIRE END OF CAMERA TO BE REMOVED TO ALLOW INSERTION HORN AND CAP TO SLIDE OVER ROD.

   DO NOT TURN CAMERA ON

2. FIT SEAL SET (2) TO SUIT CAMERA ROD DIAMETER.

   (SEAL SET COMPRISES OF NYLON SPLIT WASHER X 2, RUBBER SEAL X 2 AND A FOAM SEAL.)

3. SCREW THE CAP (1) DOWN TO OBTAIN SEAL.



ALH SYSTEMS LIMITED
1 KINGDOM AVENUE
NORTHACRE INDUSTRIAL PARK
WESTBURY, WILTS. BA13 4WE

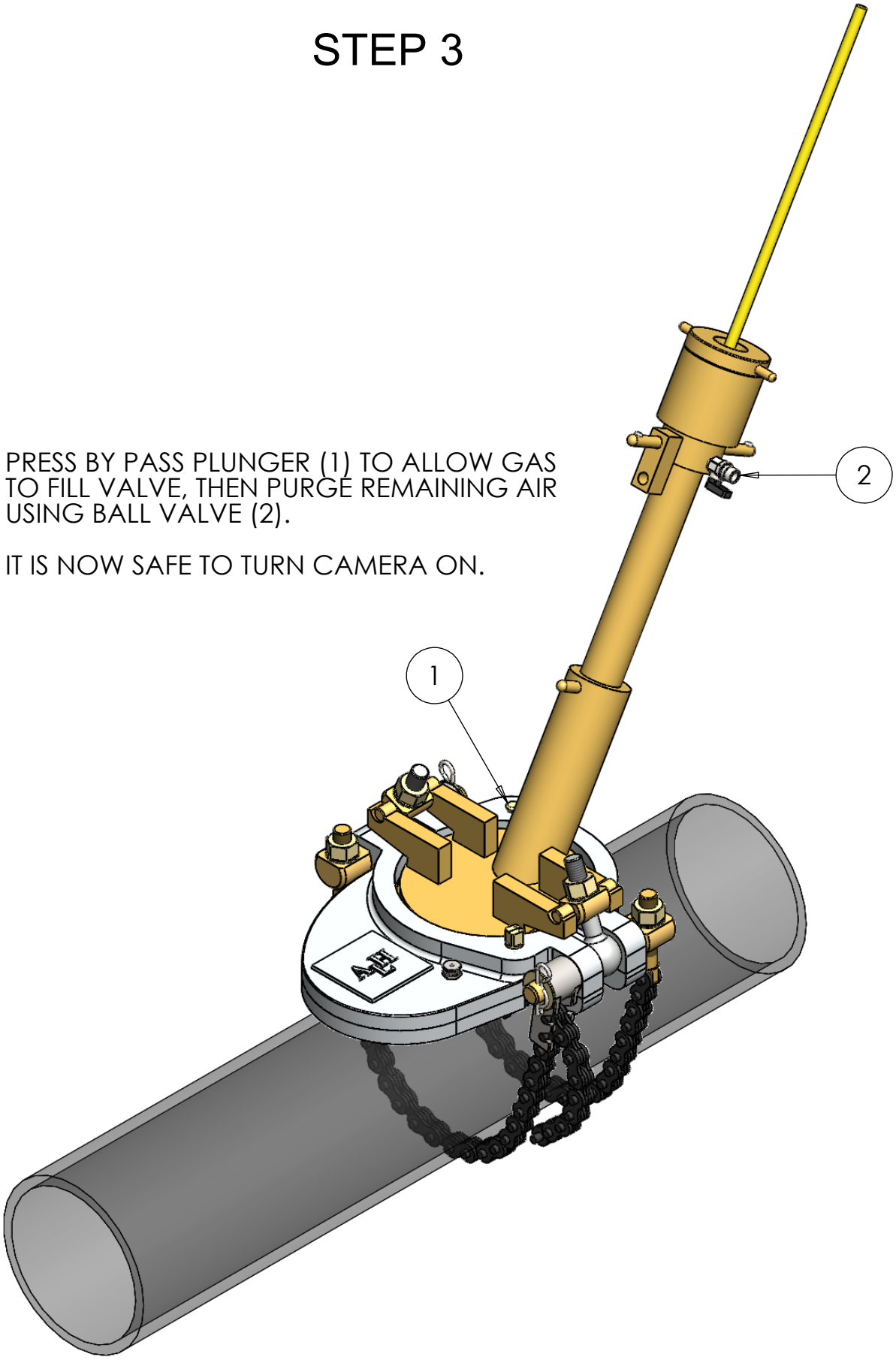
TEL: +44 (0)1373 858234

E-MAIL: sales@alh-systems.co.uk

STEP 3

1. PRESS BY PASS PLUNGER (1) TO ALLOW GAS TO FILL VALVE, THEN PURGE REMAINING AIR USING BALL VALVE (2).

2. IT IS NOW SAFE TO TURN CAMERA ON.



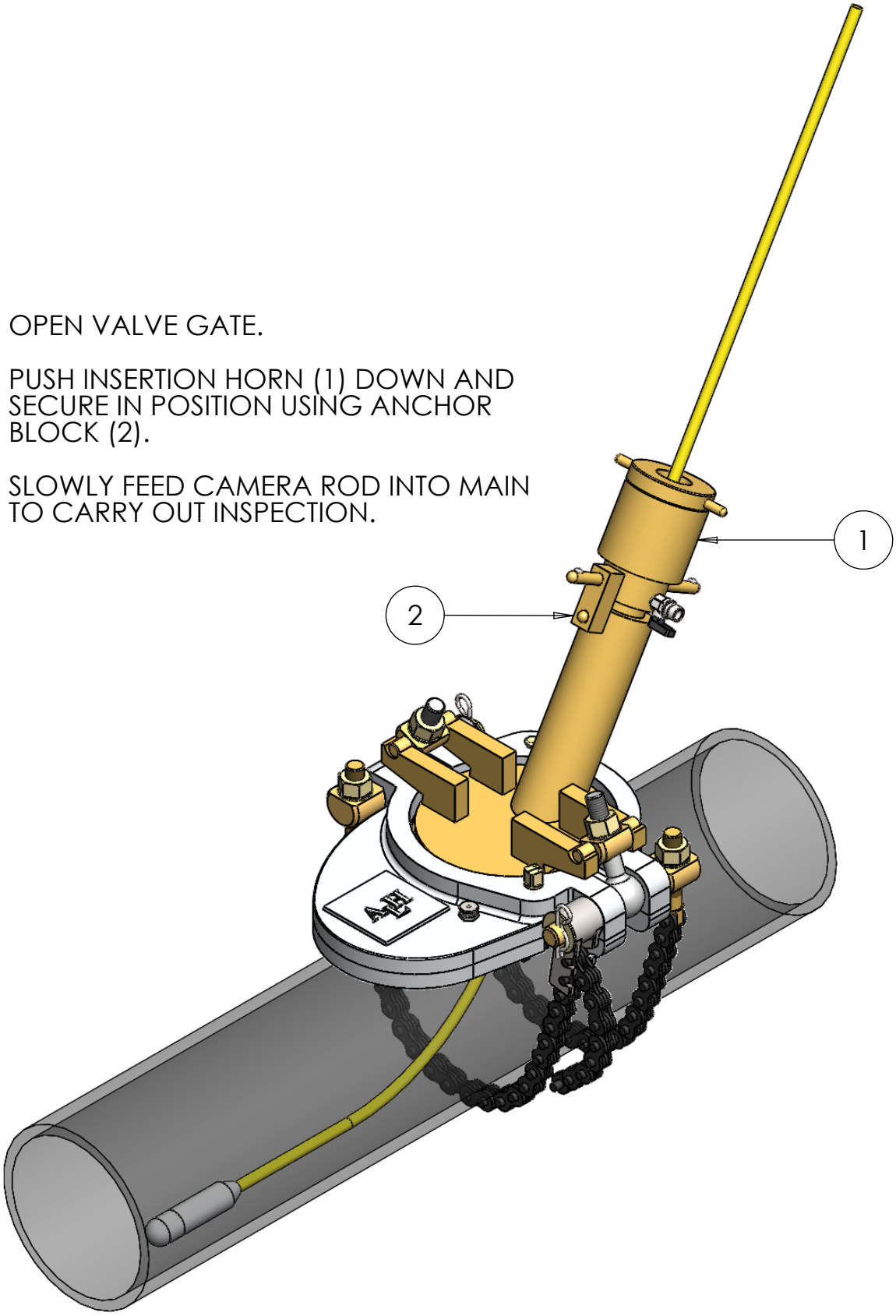
ALH SYSTEMS LIMITED
1 KINGDOM AVENUE
NORTHACRE INDUSTRIAL PARK
WESTBURY, WILTS. BA13 4WE

TEL: +44 (0)1373 858234

E-MAIL: sales@alh-systems.co.uk

STEP 4

1. OPEN VALVE GATE.
2. PUSH INSERTION HORN (1) DOWN AND SECURE IN POSITION USING ANCHOR BLOCK (2).
3. SLOWLY FEED CAMERA ROD INTO MAIN TO CARRY OUT INSPECTION.



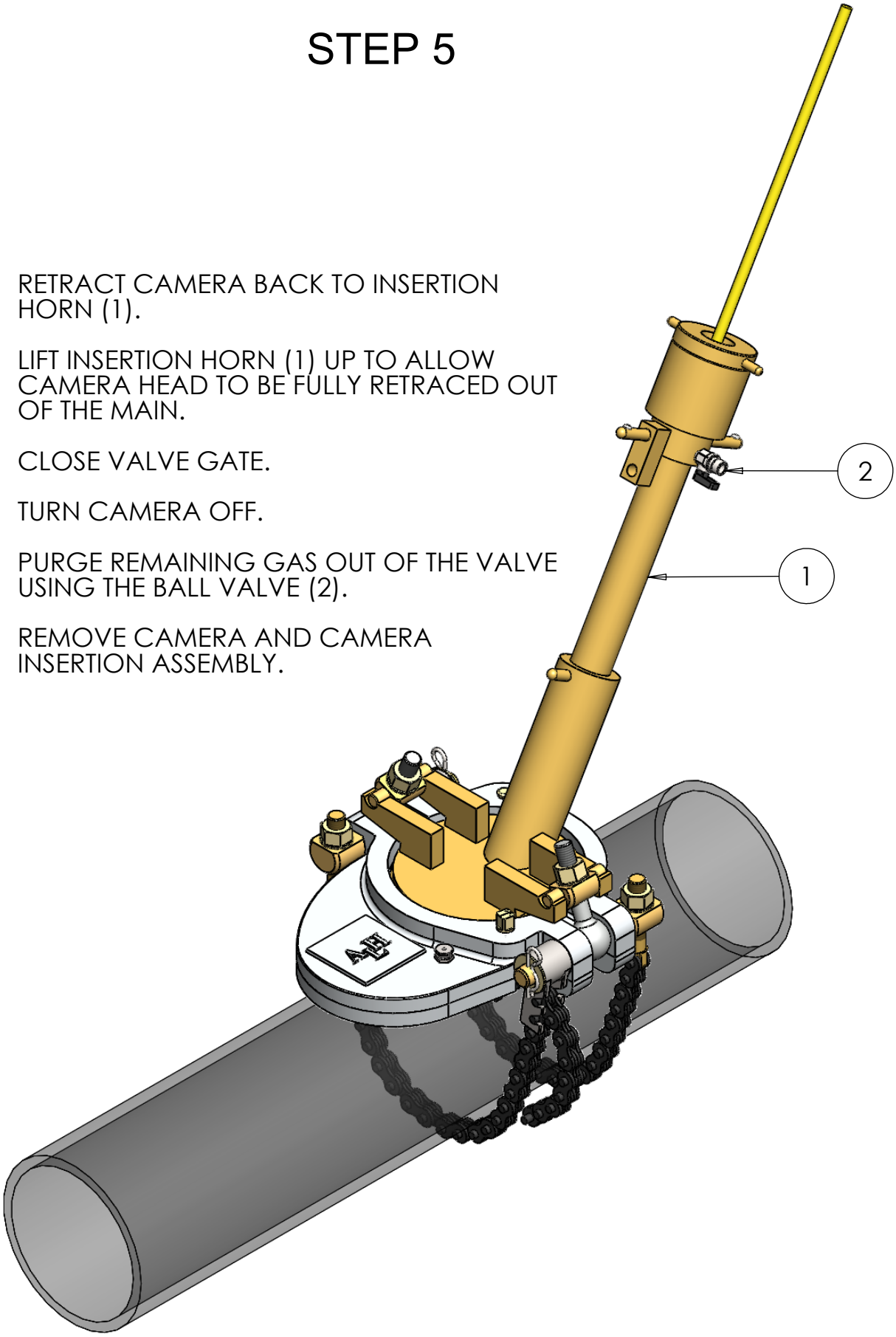
ALH SYSTEMS LIMITED
1 KINGDOM AVENUE
NORTHACRE INDUSTRIAL PARK
WESTBURY, WILTS. BA13 4WE

TEL: +44 (0)1373 858234

E-MAIL: sales@alh-systems.co.uk

STEP 5

1. RETRACT CAMERA BACK TO INSERTION HORN (1).
2. LIFT INSERTION HORN (1) UP TO ALLOW CAMERA HEAD TO BE FULLY RETRACED OUT OF THE MAIN.
3. CLOSE VALVE GATE.
4. TURN CAMERA OFF.
5. PURGE REMAINING GAS OUT OF THE VALVE USING THE BALL VALVE (2).
6. REMOVE CAMERA AND CAMERA INSERTION ASSEMBLY.

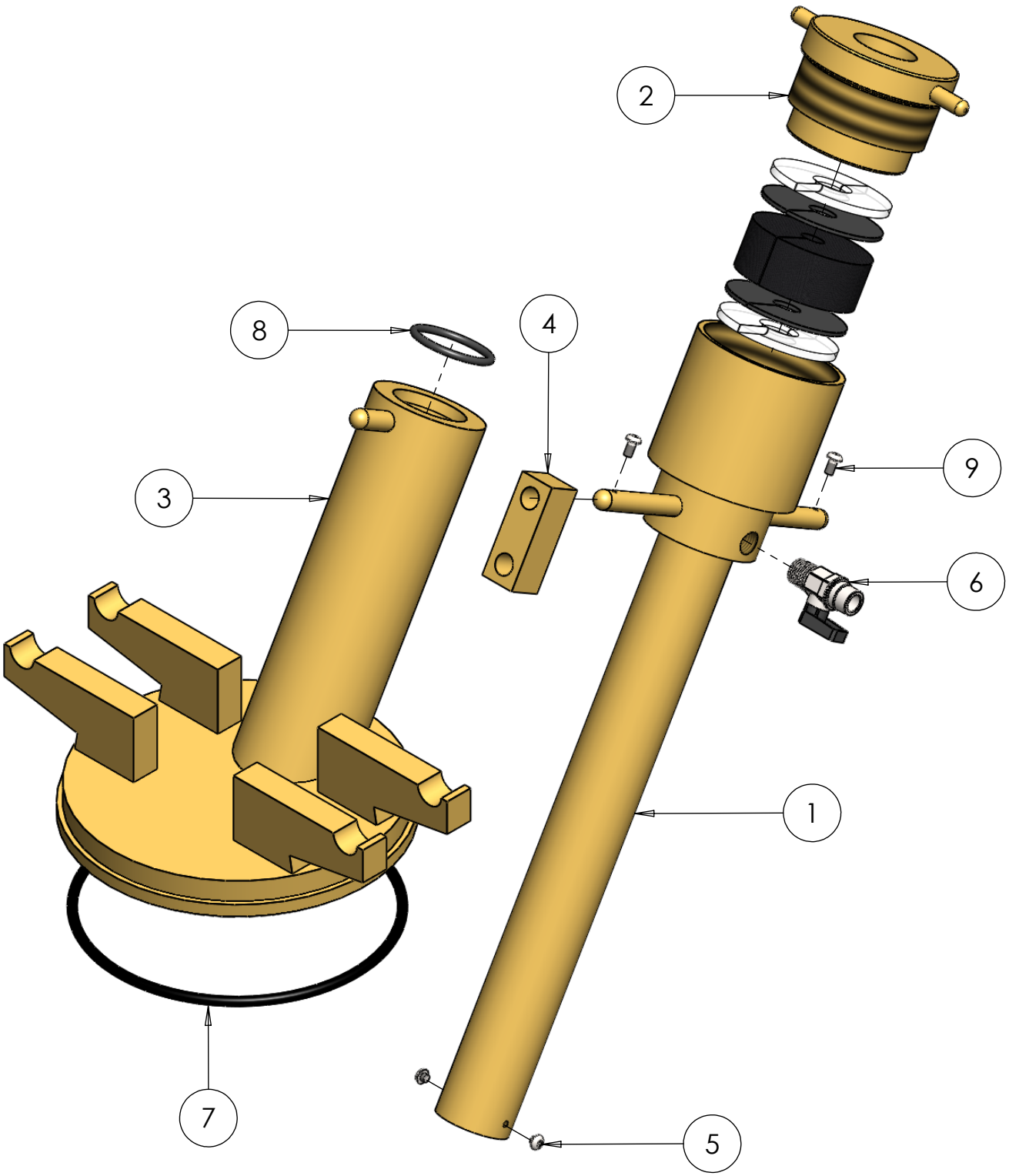


ALH SYSTEMS LIMITED
1 KINGDOM AVENUE
NORTHACRE INDUSTRIAL PARK
WESTBURY, WILTS. BA13 4WE

TEL: +44 (0)1373 858234

E-MAIL: sales@alh-systems.co.uk

ALH CAMERA INSERTION
PARTS LIST



ALH SYSTEMS LIMITED
1 KINGDOM AVENUE
NORTHACRE INDUSTRIAL PARK
WESTBURY, WILTS. BA13 4WE

TEL: +44 (0)1373 858234

E-MAIL: sales@alh-systems.co.uk

ALH CAMERA INSERTION
PARTS LIST

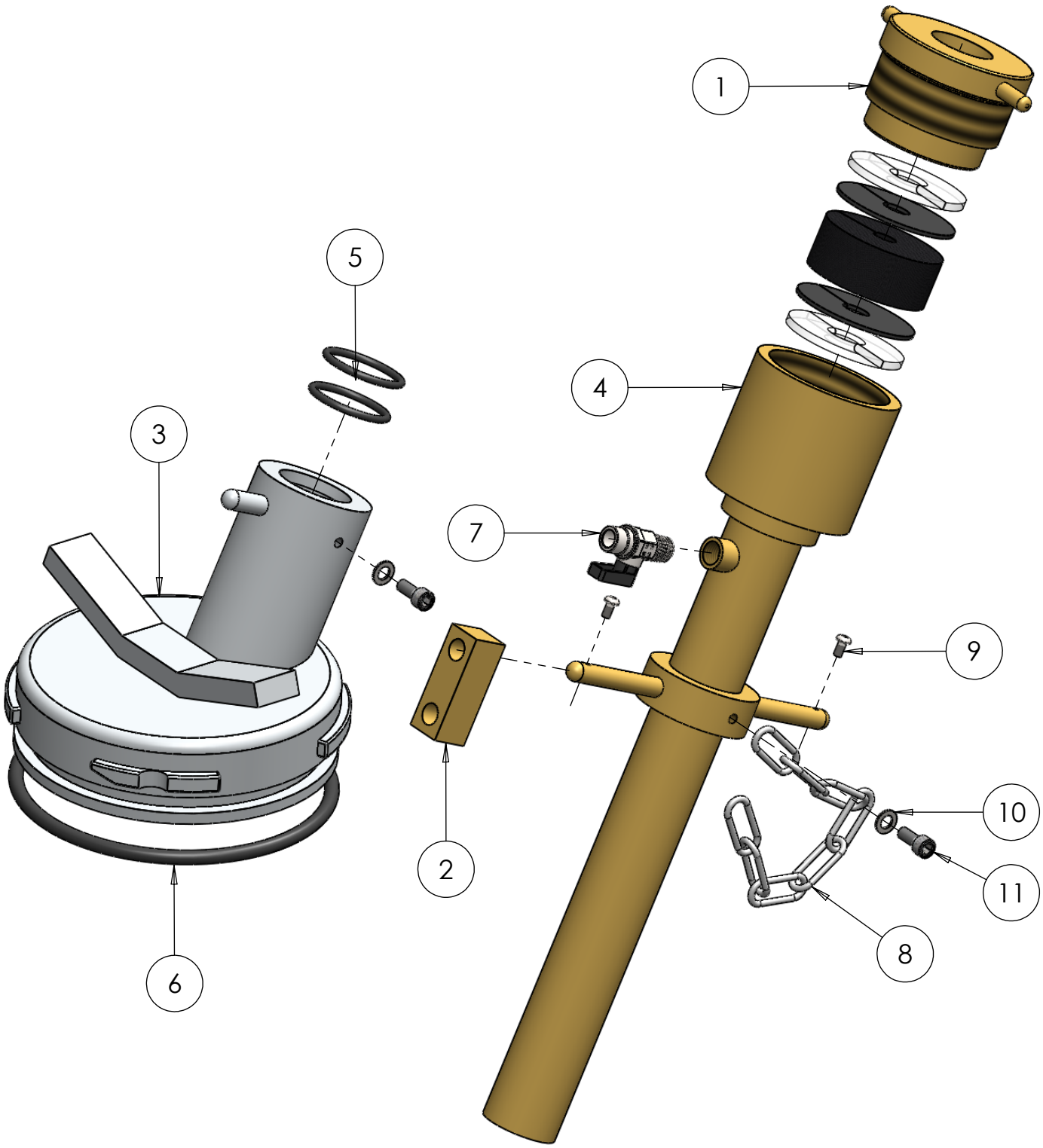
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	131-0001	ALH CAMERA INSERTION HORN	1
2	131-0002	ALH INSERTION HORN CAP	1
3	131-0003	ALH CAMERA INSERTION BASE	1
4	131-0004	ANCHOR BLOCK	1
5	S0003	BUTTON HEAD SCREW	4
6	M4576	BALL VALVE	1
7	M1056	O RING	1
8	M1059	O RING BS4518-0375-30	1
10	155-0008	1" FOAM SEAL 12mm ROD	1
11	155-0028	RUBBER SEAL 12mm ROD	2
12	155-0018	SPLIT WASHER 12mm ROD	2

ALH SYSTEMS LIMITED
1 KINGDOM AVENUE
NORTHACRE INDUSTRIAL PARK
WESTBURY, WILTS. BA13 4WE

TEL: +44 (0)1373 858234

E-MAIL: sales@alh-systems.co.uk

CAMERA INSERTION - WASK VALVE
PARTS LIST



ALH SYSTEMS LIMITED
1 KINGDOM AVENUE
NORTHACRE INDUSTRIAL PARK
WESTBURY, WILTS. BA13 4WE

TEL: +44 (0)1373 858234

E-MAIL: sales@alh-systems.co.uk

CAMERA INSERTION - WASK VALVE
PARTS LIST

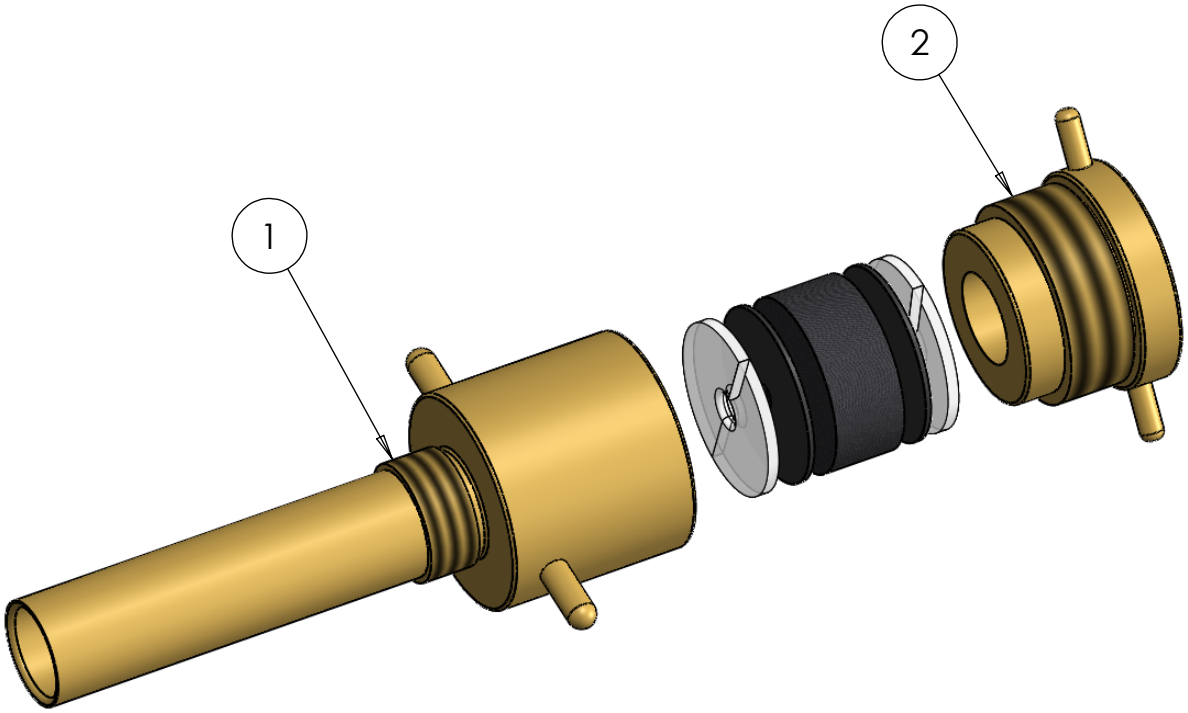
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	131-0002	ALH INSERTION HORN CAP	1
2	131-0004	ANCHOR BLOCK	1
3	131-0006	BASE FOR CAMERA INSERTION - WASK VALVE	1
4	131-0007	CAMERA INSERTION HORN - WASK VALVE	1
5	M1059	O RING BS4518-0375-3	2
6	M1073	O RING	1
7	M3098	BALL VALVE	1
8	M4582	CHAIN LINK	8
9	S0003	BUTTON HEAD SCREW	2
10	S0035	FLAT WASHER	2
11	S0479	CAP HEAD BOLT	2
12	155-0008	1" FOAM SEAL 12mm ROD	1
13	155-0018	SPLIT WASHER 12mm ROD	2
14	155-0028	RUBBER SEAL 12mm ROD	2

ALH SYSTEMS LIMITED
1 KINGDOM AVENUE
NORTHACRE INDUSTRIAL PARK
WESTBURY, WILTS. BA13 4WE

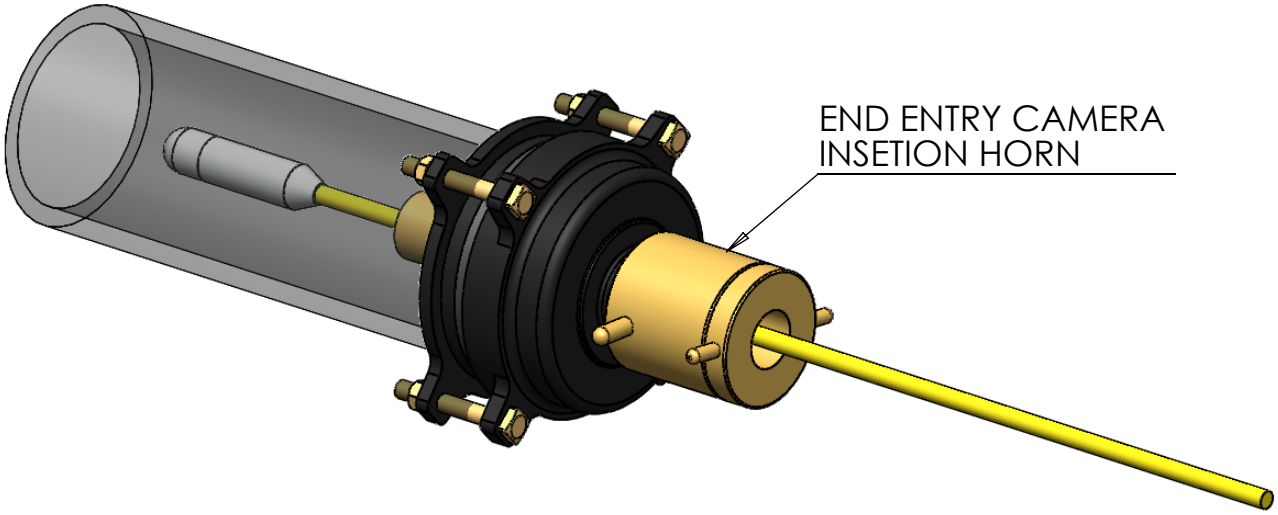
TEL: +44 (0)1373 858234

E-MAIL: sales@alh-systems.co.uk

END ENTRY



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	131-0005	END CAP ENTRY	1
2	131-0002	INSERTION HORN CAP	1

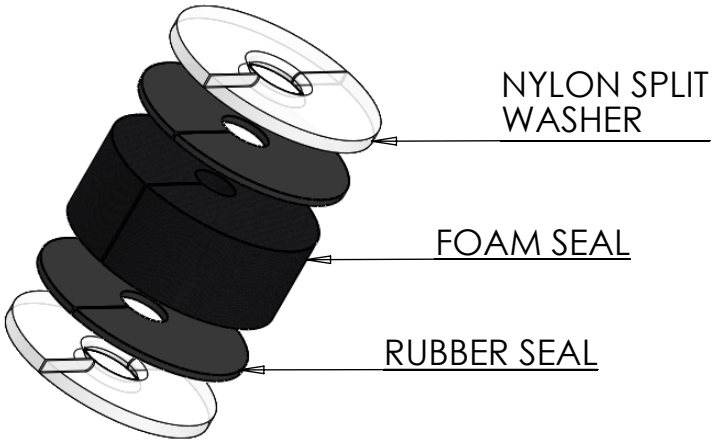


ALH SYSTEMS LIMITED
1 KINGDOM AVENUE
NORTHACRE INDUSTRIAL PARK
WESTBURY, WILTS. BA13 4WE

TEL: +44 (0)1373 858234

E-MAIL: sales@alh-systems.co.uk

SEAL SET PARTS LIST



FOAM SEALS		
PART NUMBER	DESCRIPTION	QTY.
155-0003	1" FOAM SEAL 6.7mm ROD	1
155-0005	1" FOAM SEAL 9mm ROD	1
155-0006	1" FOAM SEAL 10mm ROD	1
155-0007	1" FOAM SEAL 11mm ROD	1
155-0008	1" FOAM SEAL 12mm ROD	1
155-0008	1" FOAM SEAL 12mm ROD	1

NYLON SPLIT WASHER		
PART NUMBER	DESCRIPTION	QTY.
155-0013	SPLIT WASHER 6.7mm ROD	1
155-0015	SPLIT WASHER 9mm ROD	1
155-0016	SPLIT WASHER 10mm ROD	1
155-0017	SPLIT WASHER 11mm ROD	1
155-0018	SPLIT WASHER 12mm ROD	1

RUBBER SEALS		
PART NUMBER	DESCRIPTION	QTY.
155-0023	RUBBER SEAL 6.7mm ROD	1
155-0025	RUBBER SEAL 9mm ROD	1
155-0026	RUBBER SEAL 10mm ROD	1
155-0027	RUBBER SEAL 11mm ROD	1
155-0028	RUBBER SEAL 12mm ROD	1

ALH SYSTEMS LIMITED
1 KINGDOM AVENUE
NORTHACRE INDUSTRIAL PARK
WESTBURY, WILTS. BA13 4WE

TEL: +44 (0)1373 858234

E-MAIL: sales@alh-systems.co.uk