Technical Service Document

Dummy Load Insert Repair Instructions

APPROVALS			REVISIONS			
	INITIALS	DATE	REV	DESCRIPTION	DATE	APPR
Drawn	JFG	25APR99	A	Release	25APR99	JFG
Engineering						
Manufacturing						
Marketing						

1.0 Introduction

1.1 Scope

This procedure applies to certain dummy loads in WR284 waveguide designed with a dual channel water insert block as the load element. The following models are included:

Manufacturer	Model
GAE	GA1201, GA1204, GA1210 thru GA1214
ASTeX/Gerling Labs	GL402A, GL409, GL410, GL417
Gerling-Moore	4011

1.2 Ordering

Model/Part No.	Description
Model GA8103	Insert Repair Kit, WR284 Dummy Load

2.0 Procedure

2.1 Equipment Requirements

Hex (Allen) driver, 3/16”

2.2 Disassembly

WARNING: Turn off microwave power and disconnect line power from the microwave generator before disconnecting any waveguide components.

2.2.1 Disconnect the water supply and drain from the water fitting connections at the back of the dummy load.

2.2.2 Remove the dummy load from the waveguide set-up and drain the water from inside the load.

2.2.3 Remove the two socket head screws at the back of the dummy load.

2.2.4 Insert the hex driver into one of the two screw holes and gently push the insert block out of the dummy load waveguide.

2.3 Reassembly

2.3.1 Inspect the inside of the waveguide for signs of damage and/or corrosion. In particular, carefully inspect the four o-rings seats on the inside of the back wall. Additional repairs may be required in the event of internal damage or excess corrosion.

Technical Service Document

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CAUTION: Excess corrosion can prevent a water-tight seal or cause premature failure of the seals and result in damage to other equipment. In this case the dummy load may not be repairable and should be discarded.

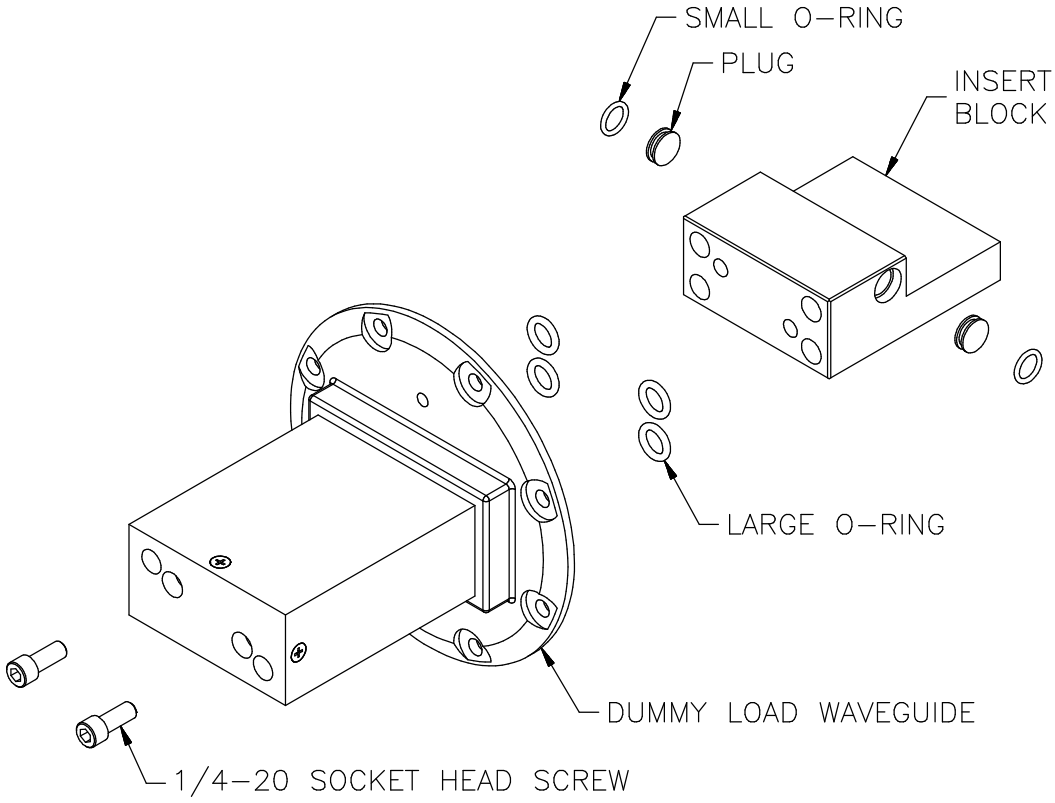
2.3.2 Remove the four greased o-rings from the polyethylene bag and place them into each of the four seats on the inside back wall of the dummy load.

2.3.3 Carefully slide the insert block assembly into the dummy load waveguide. Ensure that the two plugs (with smaller o-rings) on the sides of the block are fully inserted into the counter-bore holes.
CAUTION: If the plugs have come out (as may happen during shipping), ease them back in while being careful to avoid nicking the o-rings on the edge of the counter-bore.

2.3.4 Insert the two ¼-20 socket head screws into the counter-bored holes at the end of the waveguide and engage the screw threads into the insert block. Carefully tighten the screws with the hex driver just enough to compress the o-rings.
CAUTION: Over-tightening the screws will cause the Helicoil inserts inside the block to become loose and may result in permanent damage to the insert block.

2.3.5 Install water fittings, apply water pressure (70 psi max.) and check for water leaks.

2.3.6 Reinstall dummy load into waveguide set-up.



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