

## OD GRIPTIGHT® TEST PLUG OPERATING INSTRUCTIONS

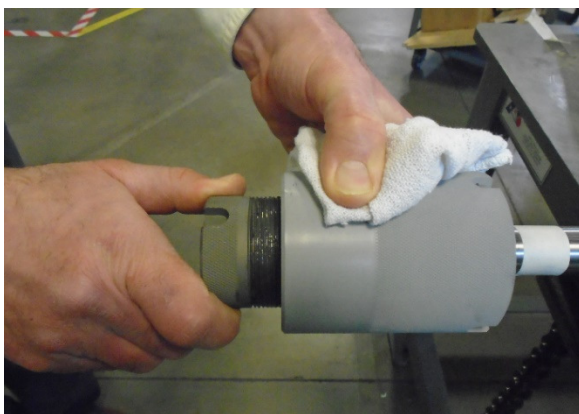
- ◆ **PRESSURE TESTING IS INHERENTLY DANGEROUS. STRICT ADHERENCE TO THESE OPERATION INSTRUCTIONS AND INDUSTRY SAFETY PRACTICES COULD PREVENT INJURY TO PERSONNEL**
- ◆ **FOR SAFETY, ALL PERSONNEL MUST BE CLEAR OF TEST PLUG WHEN PRESSURE TESTING. AN INCOMPRESSIBLE LIQUID SUCH AS WATER SHOULD BE USED AS THE TEST MEDIUM. RESIDUAL AIR OR GAS IS TO BE EVACUATED FROM THE PIPE PRIOR TO TESTING.**

### PLUG INSTALLATION

1. Remove any debris or rust from OD of pipe or tube to be tested.
2. Slide OD Plug onto pipe until pipe end is butted against the end of the bore within the plug then back off pipe approximately 1". If plug does not slide onto pipe easily, back off insert a quarter turn at a time until the plug slides on. Do not completely loosen insert or grippers may fall apart. If this happens see Reassembling Plug section below.



3. While holding body of the plug, turn the insert (reduced knurled section) clockwise until hand tight. Then use spanner wrenches in slots of the insert and body to further tighten plug. Plug is properly installed when the whole plug assembly cannot be turned by hand with respect to the pipe.



**Questions?** Contact EST Group Customer Service at any of the following locations.

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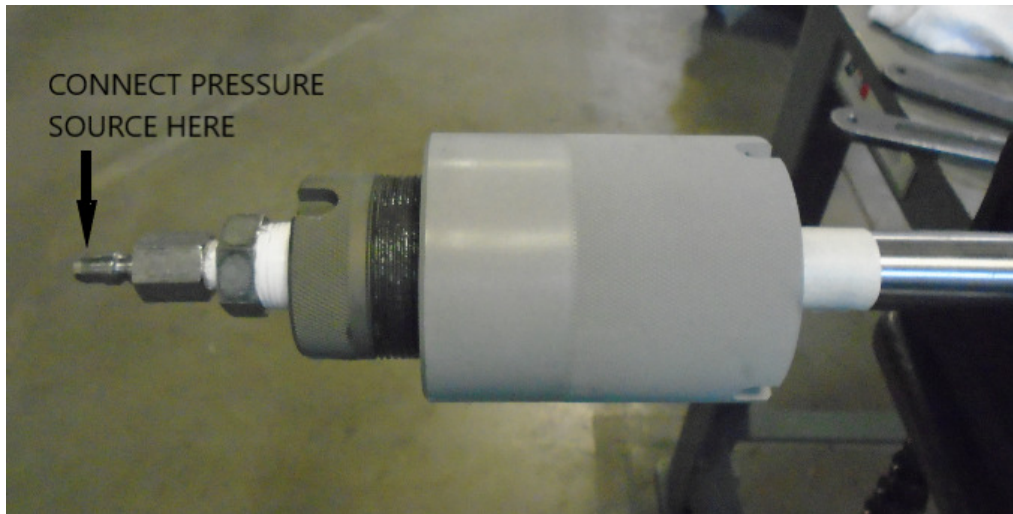
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4. Install the pressure source or vent to the plug, leak tight. For plugs not being used to pressurize or vent the system, install a pipe plug rated at or above the OD GripTight test plug test pressure, and tighten so that it is leak tight.



5. Fill with test medium while evacuating any residual air or gas. Slowly introduce the test pressure.
6. At the conclusion of the test, release ALL pressure. Loosen plug with spanner wrenches, remove and inspect plug. Any plug component, which is worn or damaged, must be replaced before attempting further testing. Contact EST Customer Service for replacement part information.
7. Prior to storing, dry all parts of the plug and lubricate the insert threads with antiseize.
8. Store these instructions with the plug.

Table 1. OD GripTight Sizes Ranges and Working Pressures					
NOMINAL PIPE SIZE	PIPE OD		PRESSURE RATING		PLUG PART NUMBER
	INCH	mm	PSI	BAR	
1/4	.508-.556	12.90-14.12	5000	343	ODGT-025P
3/8	.643-.691	16.33-17.55	5000	343	ODGT-038P
1/2	.808-.856	20.52-21.74	5000	343	ODGT-050P
3/4	1.018-1.066	25.86-27.08	5000	343	ODGT-075P
1	1.283-1.331	32.59-33.81	5000	343	ODGT-100P
1 1/4	1.628-1.676	41.35-42.57	5000	343	ODGT-125P
1 1/2	1.868-1.916	47.45-48.67	5000	343	ODGT-150P
2	2.343-2.406	59.51-61.11	5000	343	ODGT-200P
2 1/2	2.843-2.906	72.21-73.81	5000	343	ODGT-250P
3	3.469-3.531	88.11-89.69	3000	207	ODGT-300P
3 1/2	3.968-4.032	100.79-102.41	3000	207	ODGT-350-P
4	4.468-4.532	113.49-115.11	3000	207	ODGT-400-P

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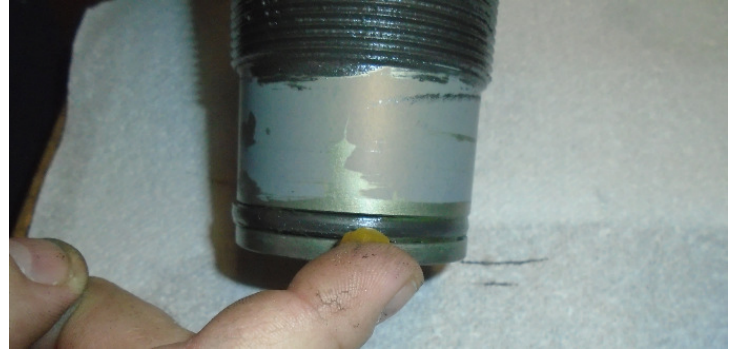
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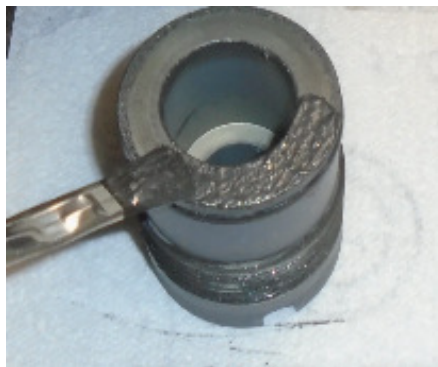
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**REASSEMBLING OF PLUG**

1. Completely disassemble OD plug. Take care not to lose any parts.
2. Beginning with insert, clean and inspect threads for damage. Re-lubricate threads with anti-seize. Clean o-ring groove and check that it is free of any dirt and grease. Examine o-ring and discard if there is any damage. Lightly lubricate o-ring with Parker o-ring grease or equivalent. Slide o-ring into insert's o-ring groove taking care not to damage it.



3. Lay insert on its end on a flat surface with threads facing up. Lubricate end of insert where grippers contact insert face with anti-seize.



4. Clean grippers and gripper retention spring. Lay grippers large flat side down on end of insert and install spring into gripper spring groove. Lay gripper assembly on end of insert.



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5. Remove seal internal o-ring and clean seal and o-ring completely. Lightly lubricate o-ring with Parker o-ring grease or equivalent. Slide o-ring into seal's o-ring groove taking care not to damage it.



6. Lay seal with large end down on top of grippers.



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7. Clean body completely. Check internal threads and internal taper are free of any dirt and grease. Lubricate threads and internal taper with anti-seize.



8. Gently slide body over seal and grippers. When sliding body over insert, take care not to pinch insert o-ring in body threads as this may damage o-ring and possibly cause a leak path. Slowly tighten body down until grippers and seal are not loose in body.



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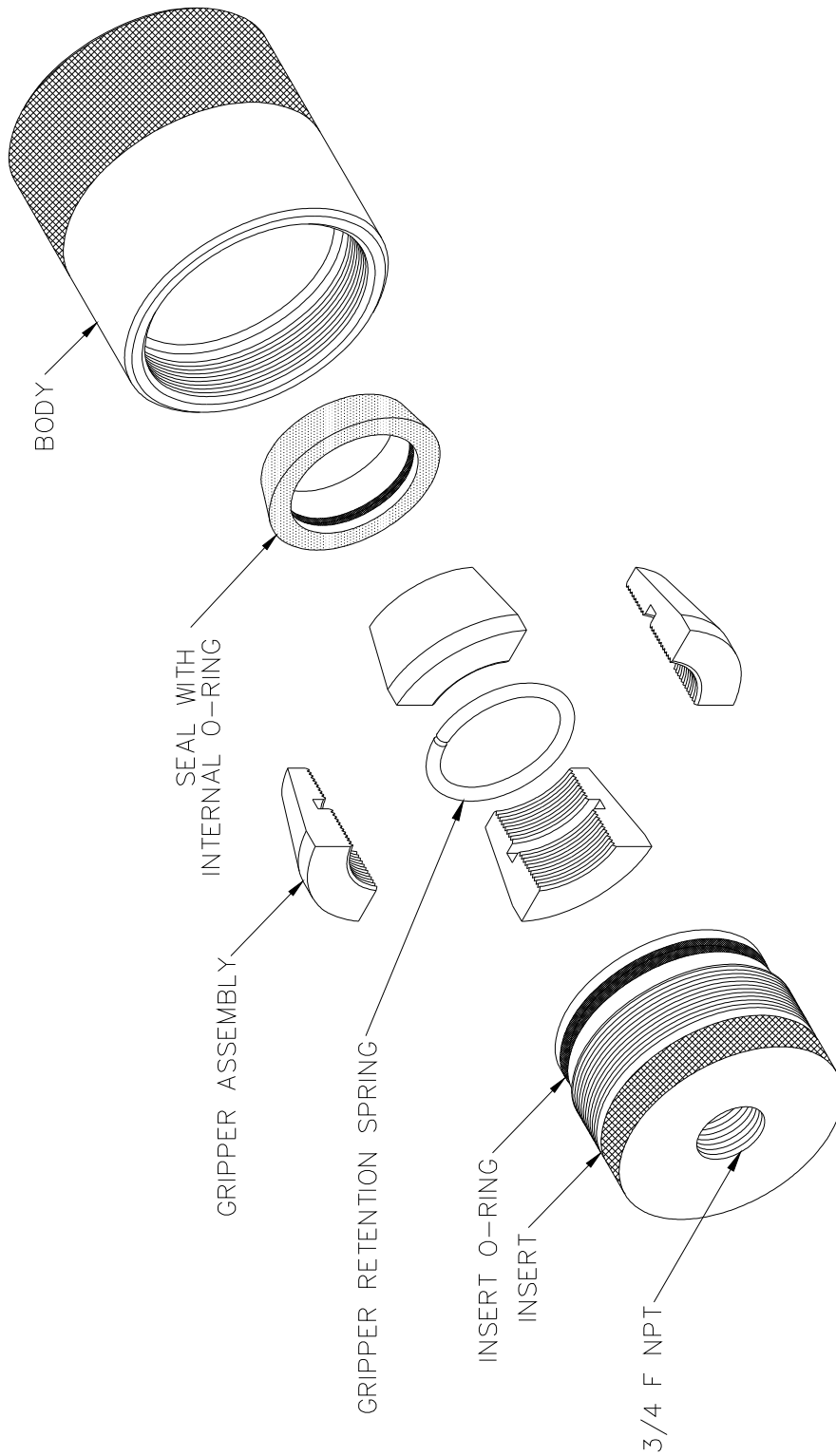
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