

Operating Procedures for 3/8P40 through 10P120 GripTight MAX® High Pressure Test Plug

Thank you for choosing to use a GripTight MAX (GTMAX®) Test Plug. Please note that the following procedures apply to testing metallic pipes or tubes. If you are testing non-metallic pipes or tubes, please contact EST Group Customer Service prior to following these instructions. Failure to follow the correct procedures for testing non-metallic pipes or tubes may result in injury to personnel and damage to equipment.

In order to carry out safe testing with your GripTight MAX Test Plug, the following equipment is required:

1. A calibrated torque wrench that is capable of producing the required torque
2. A crowfoot wrench or deep well socket (see Table 1 or 2 for sizing information)
 - a. A crowfoot wrench is suggested for Single-Shaft GripTight MAX Test Plugs (Table 1)
 - b. A deep well socket is suggested for Multi-Shaft GripTight MAX Test Plugs (Table 2)
3. A wrench to interface with the Shaft Hex (Single-Shaft GripTight MAX Test Plugs only, see Table 1)
4. Pipe cap(s) with working pressure greater than or equal to the test pressure being used (see Table 1 or 2 for size).

All required equipment is available for purchase through EST Group. All equipment and components required to maintain and refurbish GripTight MAX Test Plugs is available through EST Group. Contact EST Group Customer Service for information.

WARNING

- ⚠ Pressure testing is inherently dangerous. Strict adherence to these operating procedures and industry standard safety practices could prevent injury to personnel and damage to equipment.
- ⚠ All personnel must be clear of the GripTight MAX Test Plug during pressure testing. Never stand in the potential path of a GripTight MAX Test Plug during testing. Always understand and observe industry standard safe practices for distance between personnel and equipment being tested.
- ⚠ Pressures must never exceed the maximum pressure rating of any component in a system or the maximum pressure rating of the GripTight MAX Test Plug being used.
- ⚠ For improved safety, EST Group always recommends testing with an incompressible liquid such as water. Residual air or gas must be displaced or vented from the system prior to testing. For horizontal testing applications, an optional GripTight Vent Cap (GTVC) will allow for venting of most air or gas. The GTVC is available for most GripTight MAX Test Plugs – see Table 3: GripTight Vent Cap Selection Guide.
- ⚠ If testing pneumatically, every attempt to limit potential damage to equipment or injury to personnel must be made. The suggested test medium for pneumatic testing is nitrogen since it cannot support combustion. Testing procedures and protocol should adhere to the provisions for pneumatic testing set forth in the current ASME PCC-2 Repair of Pressure Equipment and Piping.
- ⚠ GripTight MAX Test Plugs are designed to withstand test pressure in the direction shown below. Do not use these plugs in applications that would subject the plugs to pressure in a manner that differs from the images below.

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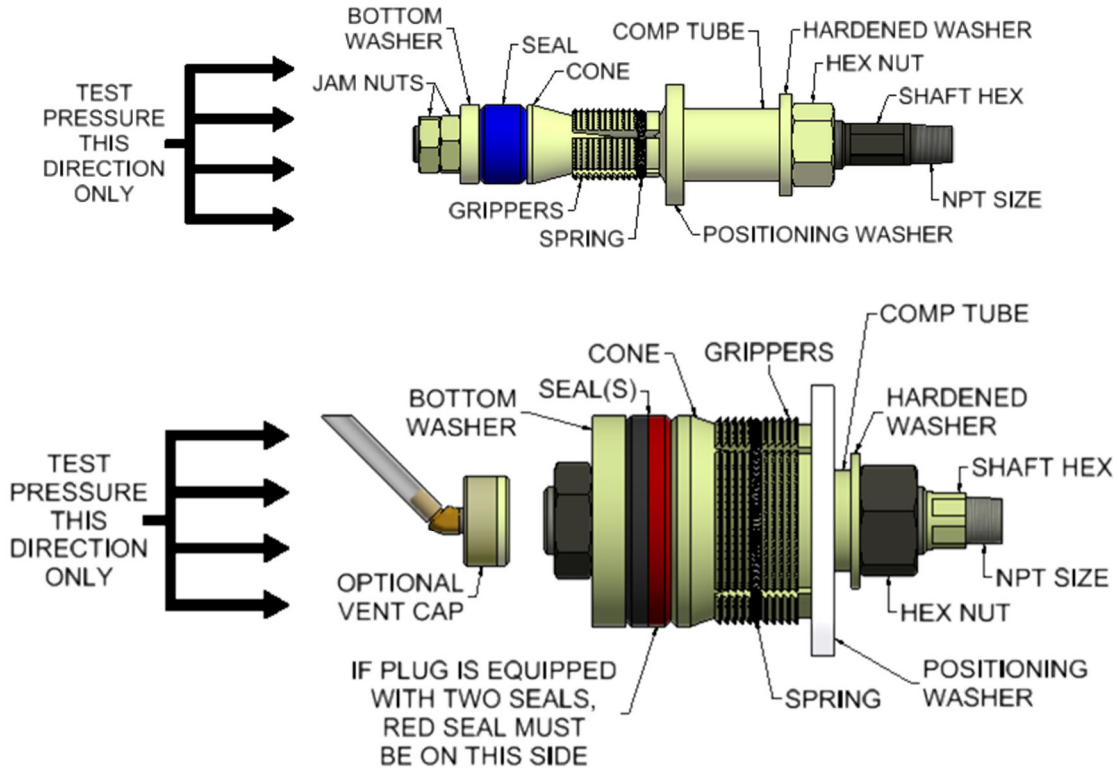
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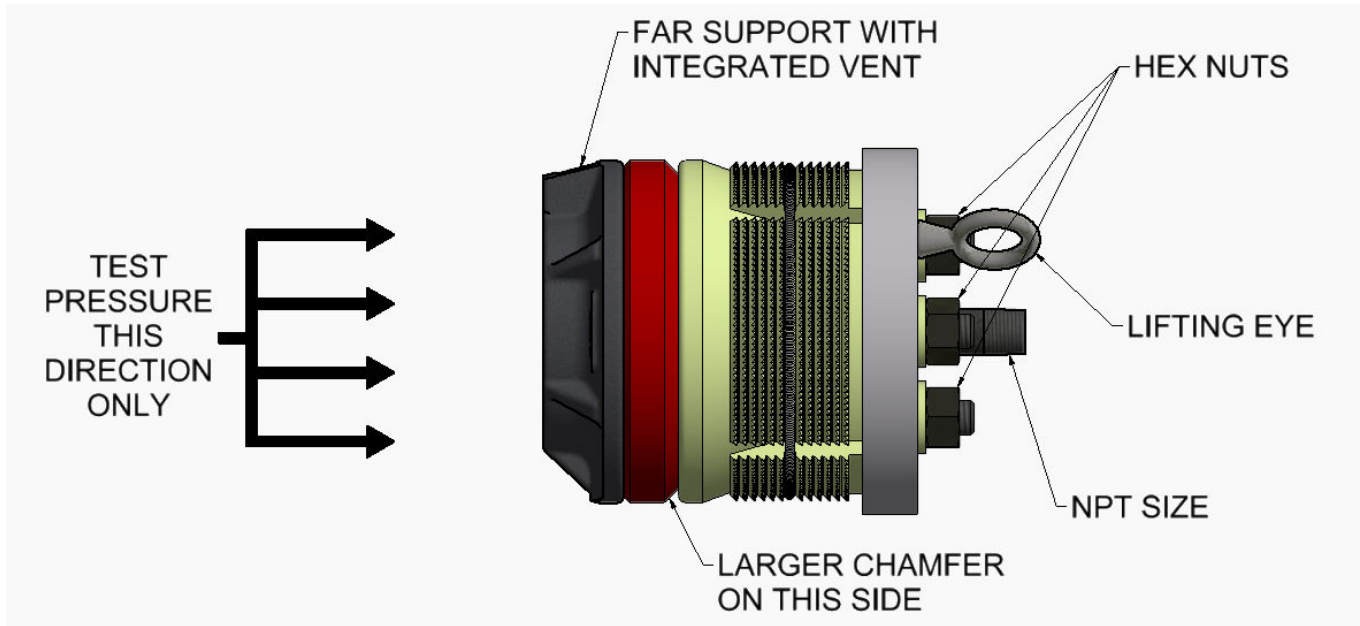
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Single-Shaft GripTight MAX High Pressure Test Plugs



Multi-Shaft GripTight MAX High Pressure Test Plugs



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1. Test Preparation

- 1.1. Fully read and understand these operating procedures. Pressure testing is inherently dangerous and must be performed as safely as possible. If any instruction contained in this document is unclear, STOP and contact EST Group Customer Service.
 - 1.2. Following these procedures and industry standard safe practices may prevent injury to personnel and damage to property.
 - 1.3. Read these instructions prior to every test. Be familiar with and use applicable **Human Performance Tools** before, during, and after every test.
 - 1.4. Hydrostatic testing is preferred over pneumatic testing due to safety concerns. Displace as much air or gas as possible prior to conducting a hydrostatic test.
 - 1.5. If any instruction contained in these operating procedures contradicts a site specific guideline or procedure: STOP and contact EST Group Customer Service for guidance.
- Test pressure **MUST NOT** exceed the maximum pressure rating of the lowest rated component under test.
 - The test pressure **MUST NOT** exceed the rated pressure of the plug.
 - Test pressure **MUST NOT** exceed 80% of specified minimum yield stress for host pipe, tube, or equipment.

Examples of **Human Performance Tools**

- Pre-Job Briefing
- Two-Minute Drill
- Three-Way Communication
- Phonetic Alphabet
- S.T.A.R. (Stop-Think-Act-Review)
- Procedure Use and Adherence
- Place Keeping (Circle Slash)
- Flagging / Operational Barriers
- Self-Checking
- Independent Verification
- Concurrent Verification
- First Check
- STOP When Unsure
- Peer Checking
- Post-Job Review

WARNING

- ⚠ **Contact EST Group Customer Service if the test pressure required exceeds the maximum plug rating or is in excess of 80% of specified minimum yield stress for host pipe, tube, or equipment.**

WARNING

GTMAX plugs are for use in all Carbon Steel, Stainless Steel and Alloy pipes with a hardness up to HRC 32. Contact EST Customer Service if pipes to be tested have a hardness greater than HRC 32.

2. Equipment Inspection and Preparation

Perform the following steps prior to performing your pressure test.

| Step/Action | Additional Action/Information/Result |
|---|---|
| 2.1. Visually inspect the plug for worn or damaged components. Replace as needed. | <ul style="list-style-type: none"> • The tapered surface between the Cone and Grippers must be free of friction producing dirt or corrosion. • Apply a light lubricant such as Molykote® DX or SAE 10W motor oil to the tapered surface of the Cone. Wipe away any excess lubricant from components making sure to leave an ample amount on tapered cone face and mating surface of gripper back. Lubricant <u>must not</u> be on seal. |
| 2.2. Lubricate tapered surface of the cone. | <ul style="list-style-type: none"> • The Seal(s) must not have excessive deformations, cuts or scores. |
| 2.3. Liberally spread antiseize over both sides of the Hardened Washer(s) and on the threads of the Shaft(s). | <p style="text-align: center;">CAUTION</p> <p>⚠ Failure to properly lubricate Shaft thread and Washer surfaces may result in unsafe operating conditions or plug leakage.</p> |

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Step/Action**Additional Action/Information/Result**

2.4. Tighten the Hex Nut(s) so the Grippers move freely to the end of the tapered Cone surface.

| <i>If</i> | <i>then</i> |
|---|---|
| Grippers move freely to end of the tapered Cone surfaces, | Loosen the Hex Nut(s) back to its/their original position(s) and go to the next step. |
| Grippers do not fully retract, | If required, remove any light rust, residue or corrosion on the cone face, gripper backs and tops and underside of positioning washer using a Scotch Brite Pad or pad of equivalent quality. Re-lubricate gripper backs, tops and tapered cone surface using a light lubricant such as Molykote® DX or SAE 10W motor oil motor oil. Wipe away any excess lubricant from components making sure to leave an ample amount on tapered cone face and mating surface of gripper back. If grippers still do not fully retract and nut cannot be easily advanced, do not use this plug for testing. Contact EST Group Customer Service for assistance. |
| The Hex Nut(s) cannot easily be tightened to allow full gripper expansion | Do not use this plug for testing. Contact EST Group Customer Service for assistance. |

2.5. Clean and dry the inside of the pipe.

- All moisture, debris, and excessive scale must be removed from the pipe ID to ensure a proper seal is established during the pressure test.

2.6. Verify that the pipe size and schedule stamped on the GripTight MAX Test Plug is equivalent to the size of the pipe you are testing, or that the inside diameter (ID) of the equipment being tested is within the ID operating range for the GripTight MAX Test Plug being used.

NOTE:

Schedule 5 wall thickness pipe, or tubes with a wall thickness less than equivalent schedule 10 pipe, must have an OD restraint. Contact EST Customer Service for information.

- See Table 1 and Table 2 for the Functional ID Operating Range for GripTight MAX Test Plugs.

2.7. Verify that the equipment to be tested is prepared before performing the test. Make sure all applicable safety procedures are observed and followed, e.g. Lock-Out Tag-Out, work permits, correct components is being tested, etc.

CAUTION

- ⚠ Special caution must be taken when applying lubricant and handling the GripTight MAX Test Plug. The lubricant must not come in contact with the Seal, the Gripper Teeth, or the inside of the pipe or tube.

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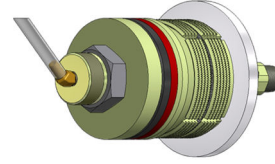
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3. Installing and Using the GripTight Vent Cap

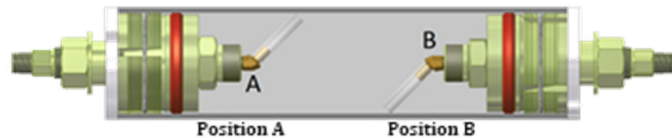
Perform these steps if you are using the optional GripTight Vent Cap (see Table 3: GripTight MAX Vent Cap Selection Guide for sizing). Use of a GripTight Vent Cap to remove air from horizontal hydrotest applications is strongly recommended. Contact EST Group Customer Service for availability. If you are not using the GripTight Vent Cap during your pressure test, then proceed to Section 4: Installing and Using the Safety Gag or Pipe Restraint.

| Step/Action | Additional Action/Information/Result |
|--|--|
| 3.1. For Single-Shaft GripTight Max Test Plugs, thread the GripTight Vent Cap on to the shaft below the Bottom Washer. For Multi-Shaft GripTight Max Test Plugs, vent is integrated in the Far Support casting, no further action is required. | <ul style="list-style-type: none"> The GripTight Vent Cap is now installed on the plug. |
| 3.2. On the GripTight Vent Cap, cut or bend the Plastic Tube so that the open end just fits within the pipe ID. | <ul style="list-style-type: none"> The Plastic Tube should easily fit within the pipe. |



3.3. Ensure GripTight Vent Cap is positioned correctly within the pipe prior to plug installation.

| If | Then |
|--|--|
| Venting air from the pipe prior to hydrostatic testing, GripTight MAX Test Plug and Vent Cap (Position A), | Install the GripTight MAX Test Plug in the pipe with the GripTight Vent Cap Plastic Tube pointing up – towards the 12 o'clock position. |
| Removing test medium from the pipe following hydrostatic testing, GripTight MAX Test Plug and Vent Cap (Position B), | Install the GripTight MAX Test Plug in the pipe with the GripTight Vent Cap Plastic Tube pointing down – towards the 6 o'clock position. |
| Using GripTight Vent Caps in Position A and Position B, | Fill and drain the pipe from Position B and vent from Position A. |



- To drain the test medium using low pressure air, introduce the compressed air through plug A. The hydrostatic test medium will be pushed out of the pipe through plug B. The pipe is drained of the test medium when air begins to come out of plug B. It may be helpful to attach a hose to plug B during this process to control the test medium.

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4. Installing and Using the Safety Gag or Pipe Restraint

Perform the following steps if you are using the optional Safety Gag. Regardless of test pressure, Safety Gags are strongly recommended for every application as they enhance the safety of the test system configuration. A Pipe Restraint is recommended for thin walled pipes or tubes (wall thickness less than Schedule 10 or equivalent wall thickness). If a Safety Gag or Pipe Restraint is not being used, skip to Section 5: Performing the Pressure Test.

| Step/Action | Additional Action/Information/Result | |
|---|--|---|
| 4.1. Install Safety Gag Pipe Clamps or Pipe Restraints onto pipe being tested. If required, the safety chains may be placed between the Pipe Clamps or the Pipe Restraints. This configuration is acceptable as long as the placement of the chains does not prevent the Safety Gag or Pipe Restraint from tightening securely on to the outside of the pipe or tube. | <i>If</i> | <i>Then</i> |
| | Using a Safety Gag | Install the Safety Gag pipe clamps onto the pipe. |
| 4.2. Tighten the bolts enough to prevent the Safety Gag or Pipe Restraint from moving. The Safety Gag or Pipe Clamp should not be able to slide or move when pushed or pulled. | <i>If</i> | <i>Then</i> |
| | Using a Pipe Restraint with or without Safety Chains | Position the Pipe Restraint over the area where the GripTight MAX Test Plug is installed. |
| <p>CAUTION</p> <p>⚠ GripTight MAX Test Plug Seals and Grippers are energized by test pressure. During pressurization, the Shaft(s) may move slightly. This is normal and expected. A small amount of slack in the Safety Chain(s) is required for this movement and energization to occur.</p> | | |
| 4.3. Insert GripTight MAX Test Plug into the equipment to be tested. | | |
| 4.4. Follow remaining GripTight MAX Test Plug installation procedure as per the steps in Section 5: Performing the Pressure Test. | | |
| 4.5. Slip the Link(s) over the Shaft(s) before introducing test medium or test pressure. Do not place the Link(s) under the GripTight MAX Test Plug Hex Nut(s). | | |



5. Performing the Pressure Test

Perform the following steps to perform a pressure test with the GripTight MAX Test Plug.

| Step/Action | Additional Action/Information/Result | |
|--|--|--|
| 5.1. Place the GripTight MAX Test Plug inside the pipe. The GripTight MAX Test Plug must be able to fit with the full length of the Grippers inside the pipe. Ideally, the plug must be inserted until the positioning washer contacts the face of the equipment being tested. | | |
| 5.2. If testing in seam-welded pipe, position the Grippers so that the weld seam is between Gripper segments. See Step/Action 9 for more information. | <p style="color: red; font-weight: bold; font-size: 1.2em;">Warning</p> <p>⚠ It is sometimes necessary to remove the weld seam in the area where the GripTight MAX Test Plug is being installed. Carefully machine the weld bead.</p> <p>Note: The inside of the tube or pipe must be clean, dry, and free of rust, scale, or debris.</p> | |

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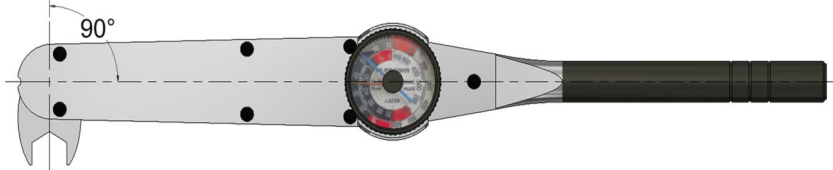

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| Step/Action | Additional Action/Information/Result | | | | | | |
|--|--|-----------|-------------|--|---|--|---|
| <p>5.3. Center the GripTight MAX Test Plug within the pipe and hand tighten the Hex Nut(s) until the test plug has gripped the pipe ID.</p> | <table border="1"> <thead> <tr> <th data-bbox="690 157 1055 199"><i>If</i></th> <th data-bbox="1055 157 1536 199"><i>Then</i></th> </tr> </thead> <tbody> <tr> <td data-bbox="690 199 1055 304">Using Multi-Shaft GripTight MAX Test Plugs horizontally,</td> <td data-bbox="1055 199 1536 304">Tighten the bottom Hex Nut(s) first to help center the GripTight MAX Test Plug within the pipe.</td> </tr> <tr> <td data-bbox="690 304 1055 367">Using a Multi-Shaft GripTight MAX Test Plug,</td> <td data-bbox="1055 304 1536 367">Incrementally tighten the Hex Nuts in a star pattern.</td> </tr> </tbody> </table> | <i>If</i> | <i>Then</i> | Using Multi-Shaft GripTight MAX Test Plugs horizontally, | Tighten the bottom Hex Nut(s) first to help center the GripTight MAX Test Plug within the pipe. | Using a Multi-Shaft GripTight MAX Test Plug, | Incrementally tighten the Hex Nuts in a star pattern. |
| <i>If</i> | <i>Then</i> | | | | | | |
| Using Multi-Shaft GripTight MAX Test Plugs horizontally, | Tighten the bottom Hex Nut(s) first to help center the GripTight MAX Test Plug within the pipe. | | | | | | |
| Using a Multi-Shaft GripTight MAX Test Plug, | Incrementally tighten the Hex Nuts in a star pattern. | | | | | | |
| <p>Note: Slight wiggling of the plug may allow for further hand tightening of the Hex Nut(s).</p> | <p style="text-align: center;">CAUTION</p> <ul style="list-style-type: none"> ⚠ Using a wrench on the Shaft Hex will prevent the Shaft on Single-Shaft GripTight MAX Test Plugs from spinning during installation. ⚠ The torque wrench being used must be calibrated to ensure that the correct amount of torque is being applied. An un-calibrated torque wrench may cause the operator to tighten the Hex Nut(s) either too much or too little. This may result in unsafe operating conditions or prevent testing from being carried out successfully. ⚠ Some crowfoot wrenches may not be able to apply the required amount of torque for some GripTight MAX Test Plugs. Before attempting to install, make sure the equipment being used is of adequate strength for the application. Using an insufficiently strong crowfoot wrench may cause injury to personnel or damage to the GripTight MAX Test Plug. ⚠ Failure to apply at least the minimum installation torque from Table 1 or Table 2 may result in unsafe operation of the plug. ⚠ If a crowfoot wrench is used, ensure wrench is used at a 90° angle relative to the handle of the torque wrench. Failure to do so can result in significant and dangerous over-torque. | | | | | | |
| <p>5.4. Tighten the Hex Nut(s) with a calibrated torque wrench and an appropriately sized crowfoot wrench or deep socket. Crowfoot wrenches are recommended for Single-Shaft GripTight MAX Test Plugs, while deep sockets are recommended for Multi-Shaft GripTight MAX Test Plugs. See Table 1: GripTight MAX Single-Shaft Test Plug Specifications and Table 2: GripTight MAX Multi-Shaft Test Plug Specifications for minimum and maximum installation torques.</p> |  | | | | | | |
| <p>5.5. If a Safety Gag or Pipe Restraint is being used, slip the Link(s) over the Shaft(s) before proceeding. The Link(s) should not be placed under the Hex Nut (s).</p> | <ul style="list-style-type: none"> • For GripTight MAX Test Plugs not being used to pressurize or vent the system, install a pipe cap with a pressure rating that is greater than or equal to the maximum test pressure being used. | | | | | | |
| <p>5.6. Install the pressure source leak tight. Use of a hose whip restraint is very strongly recommended. Inspect all connections to ensure they are leak tight.</p> | <p style="text-align: center;">CAUTION</p> <ul style="list-style-type: none"> ⚠ Before proceeding, inspect the unit / component under test to ensure every component is in the correct configuration. This includes checking to make sure all GripTight MAX Test Plugs being used have been properly installed. | | | | | | |
| <p>5.7. Fill the pipe with test medium.</p> |  <p style="text-align: center;">Position A Position B</p> <ul style="list-style-type: none"> • Check for any leaks while filling. • If using a GripTight Vent Cap, fill the pipe or tube being tested until test medium flows steadily out of GripTight MAX Test Plug in position A (the Vent position). • If not using a GripTight Vent Cap, displace residual gases from the test system by opening the system at its highest point. | | | | | | |

| Step/Action | Additional Action/Information/Result |
|---|--|
| <p>5.8. Perform the pressure test.</p> <p>5.9. Check for leaks. A drop in pressure may not necessarily indicate a leak, as the GripTight MAX Test Plugs require some time to “settle” while pressure is applied and the testing is being performed.</p> | <ul style="list-style-type: none"> Slowly introduce the test pressure. TEST PRESSURE MUST NEVER EXCEED THE MAXIMUM PRESSURE RATING OF ANY COMPONENT IN THE SYSTEM UNDER TEST. TEST PRESSURE MUST NEVER EXCEED THE MAXIMUM PRESSURE RATING OF THE GRIPTIGHT MAX TEST PLUG BEING USED. Imperfections within the pipe being tested may cause small leaks. Seam welded pipes occasionally require some weld bead to be removed. If the pipe is seam-welded and leaking persists after additional tightening, remove the weld bead in the area where the GripTight MAX Test Plug is installed. If leaks persist, additional tightening of the Hex Nut(s) may be required. RELEASE ALL TEST PRESSURE before making adjustments to the GripTight MAX Test Plug. Do not exceed the maximum torque for the GripTight MAX Test Plug. See Table 1 or Table 2 for torque values. |
| <p>5.10. Verify that GripTight MAX Test Plug movement is within specified limits.</p> <div data-bbox="107 747 673 945" style="border: 1px solid red; padding: 5px;"> <p style="text-align: center;">Warning</p> <p>⚠ Never re-torque the hex nut(s) while the plug is pressurized. This is unsafe and can cause damage to the GripTight MAX Test Plug. Release all pressure prior to adjusting GripTight MAX Test Plug torque.</p> </div> | <ul style="list-style-type: none"> Movement of the Shaft(s) during testing is expected and acceptable. For Single-Shaft GripTight MAX Test plugs, movement up to 0.25” (6.4 mm) is acceptable. For Multi-Shaft GripTight MAX Test Plugs, movement up to 0.50” (13 mm) is acceptable. If Shaft movement exceeds the acceptable amount, immediately release all pressure and remove the GripTight MAX Test Plug. Examine the GripTight MAX Test Plug components for wear. Pay particular attention to the condition of the Grippers. Replace parts as necessary. Reinstall the GripTight MAX Test Plug, following all instructions provided. Increase the installation torque used. Do not exceed the maximum torque rating for the plug. <div data-bbox="699 1031 1523 1119" style="border: 1px solid gray; padding: 5px;"> <p>Note: If excessive Shaft movement persists after using the maximum GripTight MAX installation torque, stop the test, release all test pressure, and contact EST Group customer Service for technical assistance.</p> </div> |
| <p>5.11. Release all pressure from the system once the test is completed.</p> <div data-bbox="107 1230 673 1428" style="border: 1px solid red; padding: 5px;"> <p style="text-align: center;">Warning</p> <p>⚠ Incrementally loosen Hex Nuts on multi-shaft plugs using the same star pattern as installation. Failure to do so may over stress the shafts and nuts and cause deformation or damage.</p> </div> | <ul style="list-style-type: none"> If using a GripTight Vent Cap to recover test medium, apply low pressure air to plug in Position A (see Section 3 reference). Loosen the Hex Nut(s), remove the GripTight MAX Test Plug from the pipe and then inspect the GripTight MAX Test Plug for any deformation or damage. If the plug is difficult to remove, wait for the seal to relax (up to 2-3 minutes) and a gentle wiggle of the shaft(s) or tap on the positioning washer, will help. |
| <div data-bbox="107 1434 1515 1560" style="border: 1px solid red; padding: 5px;"> <p style="text-align: center;">Warning</p> <p>⚠ Some test medium may remain inside the pipe after a hydrostatic test has been conducted. Caution must be taken when loosening Hex Nut(s) and removing GripTight MAX Test Plugs to prevent unsafe conditions from occurring during removal, e.g. water spills onto a catwalk creating slippery conditions.</p> </div> | |

6. Storage

- Prior to storing, clean and dry the GripTight MAX Test Plug. Do not allow the Seal(s) to come in contact with any cleaning chemicals or solvents. Exposure to these chemicals may damage the Seal(s).
- Re-lubricate the Shaft threads and between the Hex Nut(s) and mating surface(s) as previously described in Section 2: Equipment Inspection and Preparation. Store these instructions with each GripTight MAX Test Plug.
- Store the GripTight MAX Test Plug in an area out of direct exposure to sun or ultraviolet (UV) light. Do not store in an area where it will be subjected to heat in excess of 180°F (82°C). Excessive heat or UV light exposure will damage and prematurely degrade the Seal(s).

IF TESTING PNEUMATICALLY, IN STAINLESS STEEL, OR HIGH ALLOY PIPE/TUBE, USE MAXIMUM TORQUE.

Table 1: GripTight MAX Single-Shaft Test Plug Specifications

| Part Number | Pipe Size and Schedule inches | Shaft Hex Size Across Flats inches | Hex Nut Size Across Flats inches | Functional ID Operating Range inches (mm) | Minimum Installation Torque ft-lbs (N-m) | Maximum Installation Torque ft-lbs (N-m) | NPT Size | Maximum Test Pressure PSIG (BARG) |
|--------------|-------------------------------|------------------------------------|----------------------------------|---|--|--|----------|-----------------------------------|
| GTMAX038P40 | 3/8" SCH 40 | 3/8 | 3/4 | 0.48 - 0.52 (12.2 - 13.2) | 15 (20) | 25 (34) | 1/8 | 15000 (1034) |
| GTMAX050P160 | 1/2" SCH 160 | 3/8 | 3/4 | 0.48 - 0.52 (12.2 - 13.2) | 15 (20) | 25 (34) | 1/8 | 15000 (1034) |
| GTMAX050P80 | 1/2" SCH 80 | 3/8 | 3/4 | 0.52 - 0.57 (13.2 - 14.5) | 15 (20) | 25 (34) | 1/8 | 15000 (1034) |
| GTMAX050P40 | 1/2" SCH 40 | 3/8 | 3/4 | 0.57 - 0.63 (14.5 - 16.0) | 15 (20) | 25 (34) | 1/8 | 15000 (1034) |
| GTMAX075P160 | 3/4" SCH 160 | 3/8 | 3/4 | 0.57 - 0.63 (14.5 - 16.0) | 15 (20) | 25 (34) | 1/8 | 15000 (1034) |
| GTMAX1PXXS | 1" SCH XXS | 3/8 | 3/4 | 0.57 - 0.63 (14.5 - 16.0) | 15 (20) | 25 (34) | 1/8 | 15000 (1034) |
| GTMAX050P10 | 1/2" SCH 10 | 3/8 | 3/4 | 0.63 - 0.69 (16.0 - 17.5) | 15 (20) | 25 (34) | 1/8 | 15000 (1034) |
| GTMAX075P80 | 3/4" SCH 80 | 3/8 | 3/4 | 0.69 - 0.77 (17.5 - 19.6) | 15 (20) | 25 (34) | 1/8 | 15000 (1034) |
| GTMAX075P40 | 3/4" SCH 40 | 3/8 | 3/4 | 0.77 - 0.85 (19.6 - 21.6) | 25 (34) | 40 (54) | 1/8 | 15000 (1034) |
| GTMAX1P160 | 1" SCH 160 | 3/8 | 3/4 | 0.77 - 0.85 (19.6 - 21.6) | 25 (34) | 40 (54) | 1/8 | 15000 (1034) |
| GTMAX075P10 | 3/4" SCH 10 | 3/8 | 3/4 | 0.85 - 0.93 (21.6 - 23.6) | 25 (34) | 40 (54) | 1/8 | 15000 (1034) |
| GTMAX1P80 | 1" SCH 80 | 3/8 | 3/4 | 0.93 - 1.00 (23.6 - 25.4) | 50 (68) | 60 (81) | 1/8 | 15000 (1034) |
| GTMAX1P40 | 1" SCH 40 | 3/8 | 3/4 | 1.01 - 1.09 (25.7 - 27.7) | 50 (68) | 60 (81) | 1/8 | 15000 (1034) |
| GTMAX15PXXS | 1-1/2" XXS | 3/8 | 3/4 | 1.07 - 1.20 (27.2 - 30.5) | 50 (68) | 60 (81) | 1/8 | 15000 (1034) |
| GTMAX1P10 | 1" SCH 10 | 3/8 | 3/4 | 1.07 - 1.20 (27.2 - 30.5) | 50 (68) | 60 (81) | 1/8 | 15000 (1034) |
| GTMAX125P160 | 1-1/4" SCH 160 | 1/2 | 15/16 | 1.13 - 1.24 (28.7 - 31.5) | 50 (68) | 75 (102) | 1/4 | 15000 (1034) |
| GTMAX1P5 | 1" SCH 5 | 1/2 | 15/16 | 1.13 - 1.24 (28.7 - 31.5) | 50 (68) | 75 (102) | 1/4 | 15000 (1034) |
| GTMAX125P80 | 1-1/4" SCH 80 | 1/2 | 15/16 | 1.25 - 1.33 (31.8 - 33.8) | 50 (68) | 75 (102) | 1/4 | 15000 (1034) |
| GTMAX125P40 | 1-1/4" SCH 40/STD | 1/2 | 15/16 | 1.31 - 1.43 (33.3 - 36.3) | 50 (68) | 75 (102) | 1/4 | 15000 (1034) |
| GTMAX15P160 | 1 1/2" SCH 160 | 1/2 | 15/16 | 1.31 - 1.43 (33.3 - 36.3) | 50 (68) | 75 (102) | 1/4 | 15000 (1034) |
| GTMAX125P10 | 1 - 1/4" SCH 10 | 11/16 | 1 5/16 | 1.41 - 1.49 (35.8 - 37.8) | 75 (102) | 150 (204) | 3/8 | 15000 (1034) |
| GTMAX125P5 | 1-1/4" SCH 5 | 11/16 | 1 5/16 | 1.47 - 1.61 (37.3 - 40.9) | 75 (102) | 150 (204) | 3/8 | 15000 (1034) |
| GTMAX15P80 | 1-1/2" SCH 80 | 11/16 | 1 5/16 | 1.47 - 1.61 (37.3 - 40.9) | 75 (102) | 150 (204) | 3/8 | 15000 (1034) |
| GTMAX2PXXS | 2" XXS | 11/16 | 1 5/16 | 1.47 - 1.61 (37.3 - 40.9) | 75 (102) | 150 (204) | 3/8 | 15000 (1034) |
| GTMAX15P40 | 1-1/2" SCH 40/STD | 11/16 | 1 5/16 | 1.58 - 1.66 (40.1 - 42.2) | 75 (102) | 150 (204) | 3/8 | 15000 (1034) |
| GTMAX15P10 | 1-1/2" SCH 10 | 11/16 | 1 5/16 | 1.66 - 1.77 (42.2 - 45.0) | 75 (102) | 150 (204) | 3/8 | 15000 (1034) |
| GTMAX2P160 | 2" SCH 160 | 11/16 | 1 5/16 | 1.66 - 1.77 (42.2 - 45.0) | 75 (102) | 150 (204) | 3/8 | 15000 (1034) |
| GTMAX15P5 | 1-1/2" SCH 5 | 11/16 | 1 5/16 | 1.74 - 1.91 (44.2 - 48.5) | 75 (102) | 150 (204) | 3/8 | 15000 (1034) |
| GTMAX25PXXS | 2-1/2" XXS | 11/16 | 1 5/16 | 1.74 - 1.91 (44.2 - 48.5) | 75 (102) | 150 (204) | 3/8 | 15000 (1034) |
| GTMAX2P80 | 2" SCH 80/XS | 11/16 | 1 5/16 | 1.91 - 1.99 (48.5 - 50.5) | 75 (102) | 150 (204) | 3/8 | 12000 (827) |
| GTMAX198T | | 11/16 | 1 5/16 | 1.98 - 2.06 (50.3 - 52.3) | 75 (102) | 150 (204) | 3/8 | 12000 (827) |
| GTMAX2P40 | 2" SCH 40/STD | 11/16 | 1 5/16 | 2.04 - 2.12 (51.8 - 53.8) | 75 (102) | 150 (204) | 3/8 | 12000 (827) |
| GTMAX2P10 | 2" SCH 10 | 11/16 | 1 5/16 | 2.10 - 2.22 (53.3 - 56.4) | 75 (102) | 150 (204) | 3/8 | 12000 (827) |
| GTMAX25P160 | 2-1/2" SCH 160 | 11/16 | 1 5/16 | 2.10 - 2.22 (53.3 - 56.4) | 75 (102) | 150 (204) | 3/8 | 12000 (827) |
| GTMAX2P5 | 2" SCH 5 | 11/16 | 1 5/16 | 2.22 - 2.30 (56.4 - 58.4) | 75 (102) | 150 (204) | 3/8 | 12000 (827) |
| GTMAX25P80 | 2-1/2" SCH 80/XS | 11/16 | 1 5/16 | 2.27 - 2.45 (57.7 - 62.2) | 75 (102) | 150 (204) | 3/8 | 12000 (827) |
| GTMAX3PXXS | 3" XXS | 11/16 | 1 5/16 | 2.27 - 2.45 (57.7 - 62.2) | 75 (102) | 150 (204) | 3/8 | 12000 (827) |
| GTMAX25P40 | 2-1/2" SCH 40/STD | 1 | 1-7/8 | 2.44 - 2.54 (62.0 - 64.5) | 150 (204) | 300 (407) | 1/2 | 12000 (827) |
| GTMAX253T | | 1 | 1-7/8 | 2.53 - 2.63 (64.3 - 66.8) | 150 (204) | 300 (407) | 1/2 | 12000 (827) |
| GTMAX25P10 | 2-1/2" SCH 10 | 1 | 1-7/8 | 2.60 - 2.74 (65.9 - 69.6) | 150 (204) | 300 (407) | 1/2 | 12000 (827) |
| GTMAX3P160 | 3" SCH 160 | 1 | 1-7/8 | 2.60 - 2.74 (65.9 - 69.6) | 150 (204) | 300 (407) | 1/2 | 12000 (827) |
| GTMAX25P5 | 2"-1/2" SCH 5 | 1 | 1-7/8 | 2.68 - 2.78 (68.1 - 70.6) | 150 (204) | 300 (407) | 1/2 | 12000 (827) |
| GTMAX35PXXS | 3-1/2" XXS | 1 | 1-7/8 | 2.70 - 2.89 (68.6 - 73.4) | 150 (204) | 300 (407) | 1/2 | 10000 (689) |
| GTMAX3P80 | 3" SCH 80/XS | 1 | 1-7/8 | 2.87 - 2.98 (72.9 - 75.7) | 150 (204) | 300 (407) | 1/2 | 12000 (827) |
| GTMAX296T | | 1 | 1-7/8 | 2.96 - 3.07 (75.2 - 78.0) | 150 (204) | 300 (407) | 1/2 | 12000 (827) |
| GTMAX3P40 | 3" SCH 40/STD | 1 | 1-7/8 | 3.04 - 3.14 (77.2 - 79.8) | 150 (204) | 300 (407) | 1/2 | 12000 (827) |

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| Part Number | Pipe Size and Schedule inches | Shaft Hex Size Across Flats inches | Hex Nut Size Across Flats inches | Functional ID Operating Range inches (mm) | Minimum Installation Torque ft-lbs (N-m) | Maximum Installation Torque ft-lbs (N-m) | NPT Size | Maximum Test Pressure PSIG (BARG) |
|-------------|-------------------------------|------------------------------------|----------------------------------|---|--|--|----------|-----------------------------------|
| GTMAX4PXXS | 4" XXS | 1 | 1-7/8 | 3.12 - 3.32 (79.2 - 84.3) | 150 (204) | 300 (407) | 1/2 | 10000 (689) |
| GTMAX3P10 | 3" SCH 10 | 1 | 1-7/8 | 3.23 - 3.34 (82.0 - 84.8) | 150 (204) | 300 (407) | 1/2 | 12000 (827) |
| GTMAX3P5 | 3" SCH 5 | 1 | 1-7/8 | 3.30 - 3.41 (83.8 - 86.6) | 150 (204) | 300 (407) | 1/2 | 12000 (827) |
| GTMAX35P80 | 3-1/2" SCH 80/XS | 1 | 1-7/8 | 3.33 - 3.44 (84.6 - 87.4) | 150 (204) | 300 (407) | 1/2 | 10000 (689) |
| GTMAX4P160 | 4" SCH 160 | 1 | 1-7/8 | 3.41 - 3.57 (86.6 - 90.7) | 150 (204) | 300 (407) | 1/2 | 10000 (689) |
| GTMAX35P40 | 3-1/2" SCH 40/STD | 1 | 1-7/8 | 3.52 - 3.63 (89.4 - 92.2) | 150 (204) | 300 (407) | 1/2 | 10000 (689) |
| GTMAX4P120 | 4" SCH 120 | 1 | 1-7/8 | 3.60 - 3.74 (91.4 - 95.0) | 150 (204) | 300 (407) | 1/2 | 10000 (689) |
| GTMAX35P10 | 3-1/2" SCH 10 | 1 | 1-7/8 | 3.73 - 3.84 (94.7 - 97.5) | 150 (204) | 300 (407) | 1/2 | 10000 (689) |
| GTMAX35P5 | 3-1/2" SCH 5 | 1 | 1-7/8 | 3.80 - 3.91 (96.5 - 99.3) | 150 (204) | 300 (407) | 1/2 | 10000 (689) |
| GTMAX4P80 | 4" SCH 80/XS | 1 | 1-7/8 | 3.80 - 3.91 (96.5 - 99.3) | 150 (204) | 300 (407) | 1/2 | 10000 (689) |
| GTMAX390T | | 1 | 1-7/8 | 3.90 - 4.01 (99.1 - 101.9) | 150 (204) | 300 (407) | 1/2 | 10000 (689) |
| GTMAX4P40 | 4" SCH 40/STD | 1 | 1-7/8 | 4.00 - 4.11 (101.6 - 104.4) | 150 (204) | 300 (407) | 1/2 | 10000 (689) |
| GTMAX5PXXS | 5" XXS | 1 | 1-7/8 | 4.03 - 4.25 (102.4 - 108.0) | 150 (204) | 300 (407) | 1/2 | 8000 (552) |
| GTMAX4P10 | 4" SCH 10 | 1 | 1-7/8 | 4.23 - 4.34 (107.4 - 110.2) | 150 (204) | 300 (407) | 1/2 | 10000 (689) |
| GTMAX4P5 | 4" SCH 5 | 1 1/4 | 2-1/4 | 4.28 - 4.47 (108.7 - 113.5) | 200 (271) | 380 (515) | 3/4 | 10000 (689) |
| GTMAX5P160 | 5" SCH 160 | 1 1/4 | 2-1/4 | 4.28 - 4.47 (108.7 - 113.5) | 200 (271) | 380 (515) | 3/4 | 10000 (689) |
| GTMAX442T | | 1 1/4 | 2-1/4 | 4.42 - 4.58 (112.3 - 116.3) | 200 (271) | 380 (515) | 3/4 | 8000 (552) |
| GTMAX5P120 | 5" SCH 120 | 1 1/4 | 2-1/4 | 4.53 - 4.69 (115.1 - 119.1) | 200 (271) | 380 (515) | 3/4 | 8000 (552) |
| GTMAX466T | | 1 1/4 | 2-1/4 | 4.66 - 4.82 (118.4 - 122.4) | 200 (271) | 380 (515) | 3/4 | 8000 (552) |
| GTMAX5P80 | 5" SCH 80/XS | 1 1/4 | 2-1/4 | 4.78 - 4.91 (121.4 - 124.7) | 200 (271) | 380 (515) | 3/4 | 8000 (552) |

Table 2: GripTight MAX Multi-Shaft Test Plug Specifications

| Sales Part Number | Pipe Size and Schedule inches | Hex Nut Size Across Flats inches | Functional ID Range inches (mm) | Minimum Installation Torque ft-lbs (N-m) | Maximum Installation Torque ft-lbs (N-m) | NPT Size | Maximum Test Pressure PSIG (BARG) |
|-------------------|-------------------------------|----------------------------------|---------------------------------|--|--|----------|-----------------------------------|
| GTMAX6PXXS | 6" XXS | 3/4 | 4.87 - 5.11 (123.7 - 129.8) | 35 (48) | 55 (75) | 1/2 | 8000 (552) |
| GTMAX5P40 | 5" SCH 40/STD | 3/4 | 5.02 - 5.14 (127.5 - 130.6) | 35 (48) | 55 (75) | 1/2 | 8000 (552) |
| GTMAX514T | | 3/4 | 5.14 - 5.26 (130.6 - 133.6) | 35 (48) | 55 (75) | 1/2 | 8000 (552) |
| GTMAX6P160 | 6" SCH160 | 3/4 | 5.16 - 5.37 (131.1 - 136.4) | 35 (48) | 55 (75) | 1/2 | 8000 (552) |
| GTMAX5P10 | 5" SCH10 | 3/4 | 5.27 - 5.39 (133.9 - 136.9) | 35 (48) | 55 (75) | 1/2 | 8000 (552) |
| GTMAX5P5 | 5" SCH 5 | 3/4 | 5.32 - 5.44 (135.1 - 138.2) | 35 (48) | 55 (75) | 1/2 | 8000 (552) |
| GTMAX534T | | 3/4 | 5.34 - 5.51 (135.6 - 140.0) | 35 (48) | 55 (75) | 1/2 | 8000 (552) |
| GTMAX6P120 | 6" SCH120 | 3/4 | 5.47 - 5.64 (138.9 - 143.3) | 35 (48) | 55 (75) | 1/2 | 8000 (552) |
| GTMAX562T | | 3/4 | 5.62 - 5.76 (142.7 - 146.3) | 35 (48) | 55 (75) | 1/2 | 8000 (552) |
| GTMAX6P80 | 6" SCH 80/XS | 3/4 | 5.73 - 5.87 (145.5 - 149.1) | 35 (48) | 55 (75) | 1/2 | 8000 (552) |
| GTMAX588T | | 3/4 | 5.88 - 6.03 (149.4 - 153.2) | 35 (48) | 55 (75) | 1/2 | 8000 (552) |
| GTMAX6P40 | 6" SCH 40/STD | 3/4 | 6.04 - 6.17 (153.4 - 156.7) | 35 (48) | 55 (75) | 1/2 | 8000 (552) |
| GTMAX618T | | 3/4 | 6.18 - 6.32 (157.0 - 160.5) | 35 (48) | 55 (75) | 1/2 | 8000 (552) |
| GTMAX6P10 | 6" SCH10 | 1 1/16 | 6.33 - 6.47 (160.8 - 164.3) | 60 (81) | 100 (136) | 3/4 | 8000 (552) |
| GTMAX6P5 | 6" SCH5 | 1 1/16 | 6.38 - 6.52 (162.1 - 165.6) | 60 (81) | 100 (136) | 3/4 | 8000 (552) |
| GTMAX653T | | 1 1/16 | 6.53 - 6.67 (165.9 - 169.4) | 60 (81) | 100 (136) | 3/4 | 8000 (552) |
| GTMAX668T | | 1 1/16 | 6.68 - 6.82 (169.7 - 173.2) | 60 (81) | 100 (136) | 3/4 | 8000 (552) |
| GTMAX8P160 | 8" SCH 160 | 1 1/16 | 6.78 - 7.04 (172.2 - 178.8) | 60 (81) | 100 (136) | 3/4 | 8000 (552) |
| GTMAX8PXXS | 8" XXS | 1 1/16 | 6.85 - 7.09 (174.0 - 180.1) | 60 (81) | 100 (136) | 3/4 | 8000 (552) |
| GTMAX8P140 | 8" SCH 140 | 1 1/16 | 6.97 - 7.20 (177.0 - 182.9) | 60 (81) | 100 (136) | 3/4 | 8000 (552) |
| GTMAX8P120 | 8" SCH 120 | 1 1/16 | 7.16 - 7.37 (181.9 - 187.2) | 60 (81) | 100 (136) | 3/4 | 8000 (552) |
| GTMAX730T | | 1 1/16 | 7.30 - 7.48 (185.4 - 190.0) | 60 (81) | 100 (136) | 3/4 | 8000 (552) |
| GTMAX8P100 | 8" SCH 100 | 1 1/16 | 7.41 - 7.59 (188.2 - 192.8) | 60 (81) | 100 (136) | 3/4 | 8000 (552) |
| GTMAX8P80 | 8" SCH 80/XS | 1 1/16 | 7.60 - 7.75 (193.0 - 196.9) | 60 (81) | 100 (136) | 3/4 | 8000 (552) |
| GTMAX769T | | 1 1/16 | 7.69 - 7.84 (195.3 - 199.1) | 60 (81) | 100 (136) | 3/4 | 8000 (552) |
| GTMAX8P60 | 8" SCH 60 | 1 1/16 | 7.78 - 7.93 (197.6 - 201.4) | 60 (81) | 100 (136) | 3/4 | 8000 (552) |
| GTMAX787T | | 1 1/16 | 7.87 - 8.02 (199.9 - 203.7) | 60 (81) | 100 (136) | 3/4 | 8000 (552) |
| GTMAX8P40 | 8" SCH 40/STD | 1 1/16 | 7.95 - 8.10 (201.9 - 205.7) | 60 (81) | 100 (136) | 3/4 | 8000 (552) |
| GTMAX8P30 | 8" SCH 30 | 1 7/16 | 8.04 - 8.19 (204.2 - 208.0) | 150 (202) | 250 (340) | 3/4 | 8000 (552) |
| GTMAX8P20 | 8" SCH 20 | 1 7/16 | 8.10 - 8.25 (205.7 - 209.6) | 150 (202) | 250 (340) | 3/4 | 8000 (552) |
| GTMAX820T | | 1 7/16 | 8.20 - 8.35 (208.3 - 212.1) | 150 (202) | 250 (340) | 3/4 | 8000 (552) |
| GTMAX8P10 | 8" SCH 10 | 1 7/16 | 8.30 - 8.45 (210.8 - 214.6) | 150 (202) | 250 (340) | 3/4 | 8000 (552) |
| GTMAX8P5 | 8" SCH 5 | 1 7/16 | 8.38 - 8.53 (212.9 - 216.7) | 150 (202) | 250 (340) | 3/4 | 8000 (552) |
| GTMAX10P160 | 10" SCH 160 | 1 7/16 | 8.45 - 8.91 (214.6 - 226.3) | 150 (202) | 250 (340) | 3/4 | 6000 (414) |
| GTMAX10P140 | 10" SCH 140 | 1 7/16 | 8.70 - 9.16 (221.0 - 232.7) | 150 (202) | 250 (340) | 3/4 | 6000 (414) |
| GTMAX10P120 | 10" SCH 120 | 1 7/16 | 9.01 - 9.47 (228.9 - 240.5) | 150 (202) | 250 (340) | 3/4 | 6000 (414) |

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Table 3: GripTight MAX Vent Cap Selection Guide

| Pipe Size NPS (DN) | SCH 5 | SCH 10 | STD | SCH40 | XS | SCH80 | SCH120 | SCH160 | XXS |
|---------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 3/8 (10) | * | * | * | * | * | * | * | * | * |
| 1/2 (15) | * | * | * | * | * | * | * | * | * |
| 3/4 (20) | * | * | * | * | * | * | * | * | * |
| 1 (25) | * | * | * | * | * | * | * | * | * |
| 1-1/4 (32) | GTVC-0088 | GTVC-0088 | * | * | * | * | * | * | * |
| 1-1/2 (40) | GTVC-0088 | GTVC-0088 | GTVC-0088 | GTVC-0088 | GTVC-0088 | GTVC-0088 | * | * | * |
| 2 (50) | GTVC-0088 | GTVC-0088 | GTVC-0088 | GTVC-0088 | GTVC-0088 | GTVC-0088 | * | GTVC-0088 | GTVC-0088 |
| 2-1/2 (65) | GTVC-0125 | GTVC-0125 | GTVC-0125 | GTVC-0125 | GTVC-0088 | GTVC-0088 | * | GTVC-0088 | GTVC-0088 |
| 3 (80) | GTVC-0125 | GTVC-0125 | GTVC-0125 | GTVC-0125 | GTVC-0125 | GTVC-0125 | * | GTVC-0125 | GTVC-0088 |
| 3-1/2 (90) | GTVC-0125 | GTVC-0125 | GTVC-0125 | GTVC-0125 | GTVC-0125 | GTVC-0125 | * | * | GTVC-0125 |
| 4 (100) | GTVC-0150 | GTVC-0125 | GTVC-0125 | GTVC-0125 | GTVC-0125 | GTVC-0125 | GTVC-0125 | GTVC-0125 | GTVC-0125 |
| 5 (125) | ** | ** | ** | ** | GTVC-0150 | GTVC-0150 | GTVC-0150 | GTVC-0150 | GTVC-0125 |
| 6 (150) | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 8 (200) 10 (250) | ** | ** | ** | ** | ** | ** | ** | ** | ** |

*GripTight Vent Caps not available due to small pipe / tube ID's and space restrictions.

** Multi-Shaft GTMAX Test Plugs with cast Far Supports have integrated vents. For Multi-Shaft GTMAX Test Plugs with machined Far Supports, use Vent Cap GTVC-0075

Table 4: Replacement Parts and Accessories for Standard NPS Size GripTight MAX Test Plugs

| GTMAX Part Number | Replacement Gripper Assembly (Includes Spring) | Replacement Seal | Replacement Spring | Safety Gag | High Pressure Cap |
|-------------------|--|-------------------|--------------------|------------|-------------------|
| GTMAX-038P40 | GTMAX-038P40-GR | GTMAX-038P40-URS | GTMAX-038P40-SPR | SFG-0038 | M00281 |
| GTMAX-050P80 | GTMAX-050P80-GR | GTMAX-050P80-URS | GTMAX-050P80-SPR | SFG-0050 | M00281 |
| GTMAX-050P40 | GTMAX-050P40-GR | GTMAX-050P40-URS | GTMAX-050P40-SPR | SFG-0050 | M00281 |
| GTMAX-075P160 | GTMAX-075P160-GR | GTMAX-075P160-URS | GTMAX-075P160-SPR | SFG-0075 | M00281 |
| GTMAX-1PXXS | GTMAX-1PXXS-GR | GTMAX-1PXXS-URS | GTMAX-1PXXS-SPR | SFG-0100 | M00281 |
| GTMAX-050P10 | GTMAX-050P10-GR | GTMAX-050P10-URS | GTMAX-050P10-SPR | SFG-0050 | M00281 |
| GTMAX-075P80 | GTMAX-075P80-GR | GTMAX-075P80-URS | GTMAX-075P80-SPR | SFG-0075 | M00281 |
| GTMAX-075P40 | GTMAX-075P40-GR | GTMAX-075P40-URS | GTMAX-075P40-SPR | SFG-0075 | M00281 |
| GTMAX-075P10 | GTMAX-075P10-GR | GTMAX-075P10-URS | GTMAX-075P10-SPR | SFG-0075 | M00281 |
| GTMAX-1P160 | GTMAX-1P160-GR | GTMAX-1P160-URS | GTMAX-1P160-SPR | SFG-0100 | M00281 |
| GTMAX-1P80 | GTMAX-1P80-GR | GTMAX-1P80-URS | GTMAX-1P80-SPR | SFG-0100 | M00281 |
| GTMAX-1P40 | GTMAX-1P40-GR | GTMAX-1P40-URS | GTMAX-1P40-SPR | SFG-0100 | M00281 |
| GTMAX-1P10 | GTMAX-1P10-GR | GTMAX-1P10-URS | GTMAX-1P10-SPR | SFG-0100 | M00281 |
| GTMAX-15PXXS | GTMAX-15PXXS-GR | GTMAX-15PXXS-URS | GTMAX-15PXXS-SPR | SFG-0150 | M00281 |
| GTMAX-1P5 | GTMAX-1P5-GR | GTMAX-1P5-URS | GTMAX-1P5-SPR | SFG-0100 | M00282 |
| GTMAX-125P160 | GTMAX-125P160-GR | GTMAX-125P160-URS | GTMAX-125P160-SPR | SFG-0125 | M00282 |
| GTMAX-125P80 | GTMAX-125P80-GR | GTMAX-125P80-URS | GTMAX-125P80-SPR | SFG-0125 | M00282 |
| GTMAX-125P40 | GTMAX-125P40-GR | GTMAX-125P40-URS | GTMAX-125P40-SPR | SFG-0125 | M00282 |
| GTMAX-15P160 | GTMAX-15P160-GR | GTMAX-15P160-URS | GTMAX-15P160-SPR | SFG-0150 | M00282 |
| GTMAX-125P10 | GTMAX-125P10-GR | GTMAX-125P10-URS | GTMAX-125P10-SPR | SFG-0125 | M00283 |
| GTMAX-125P5 | GTMAX-125P5-GR | GTMAX-125P5-URS | GTMAX-125P5-SPR | SFG-0125 | M00283 |
| GTMAX-15P80 | GTMAX-15P80-GR | GTMAX-15P80-URS | GTMAX-15P80-SPR | SFG-0150 | M00283 |

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| GTMAX Part Number | Replacement Gripper Assembly (Includes Spring) | Replacement Seal | Replacement Spring | Safety Gag | High Pressure Cap |
|-------------------|--|------------------|--------------------|------------|-------------------|
| GTMAX-2PXXS | GTMAX-2PXXS-GR | GTMAX-2PXXS-URS | GTMAX-2PXXS-SPR | SFG-0200 | M00283 |
| GTMAX-15P40 | GTMAX-15P40-GR | GTMAX-15P40-URS | GTMAX-15P40-SPR | SFG-0150 | M00283 |
| GTMAX-15P10 | GTMAX-15P10-GR | GTMAX-15P10-URS | GTMAX-15P10-SPR | SFG-0150 | M00283 |
| GTMAX-2P160 | GTMAX-2P160-GR | GTMAX-2P160-URS | GTMAX-2P160-SPR | SFG-0200 | M00283 |
| GTMAX-15P5 | GTMAX-15P5-GR | GTMAX-15P5-URS | GTMAX-15P5-SPR | SFG-0150 | M00283 |
| GTMAX-25PXXS | GTMAX-25PXXS-GR | GTMAX-25PXXS-URS | GTMAX-25PXXS-SPR | SFG-0250 | M00283 |
| GTMAX-2P80 | GTMAX-2P80-GR | GTMAX-2P80-URS | GTMAX-2P80-SPR | SFG-0200 | M00283 |
| GTMAX-2P40 | GTMAX-2P40-GR | GTMAX-2P40-URS | GTMAX-2P40-SPR | SFG-0200 | M00283 |
| GTMAX-2P10 | GTMAX-2P10-GR | GTMAX-2P10-URS | GTMAX-2P10-SPR | SFG-0200 | M00283 |
| GTMAX-25P160 | GTMAX-25P160-GR | GTMAX-25P160-URS | GTMAX-25P160-SPR | SFG-0250 | M00283 |
| GTMAX-2P5 | GTMAX-2P5-GR | GTMAX-2P5-URS | GTMAX-2P5-SPR | SFG-0200 | M00283 |
| GTMAX-25P80 | GTMAX-25P80-GR | GTMAX-25P80-URS | GTMAX-25P80-SPR | SFG-0250 | M00283 |
| GTMAX-3PXXS | GTMAX-3PXXS-GR | GTMAX-3PXXS-URS | GTMAX-3PXXS-SPR | SFG-0300 | M00283 |
| GTMAX-25P40 | GTMAX-25P40-GR | GTMAX-25P40-URS | GTMAX-25P40-SPR | SFG-0250 | M00284 |
| GTMAX-25P10 | GTMAX-25P10-GR | GTMAX-25P10-URS | GTMAX-25P10-SPR | SFG-0250 | M00284 |
| GTMAX-3P160 | GTMAX-3P160-GR | GTMAX-3P160-URS | GTMAX-3P160-SPR | SFG-0300 | M00284 |
| GTMAX-25P5 | GTMAX-25P5-GR | GTMAX-25P5-URS | GTMAX-25P5-SPR | SFG-0250 | M00284 |
| GTMAX-35PXXS | GTMAX-35PXXS-GR | GTMAX-35PXXS-URS | GTMAX-35PXXS-SPR | SFG-0350 | M00284 |
| GTMAX-3P80 | GTMAX-3P80-GR | GTMAX-3P80-URS | GTMAX-3P80-SPR | SFG-0300 | M00284 |
| GTMAX-3P40 | GTMAX-3P40-GR | GTMAX-3P40-URS | GTMAX-3P40-SPR | SFG-0300 | M00284 |
| GTMAX-4PXXS | GTMAX-4PXXS-GR | GTMAX-4PXXS-URS | GTMAX-4PXXS-SPR | SFG-0400 | M00284 |
| GTMAX-3P10 | GTMAX-3P10-GR | GTMAX-3P10-URS | GTMAX-3P10-SPR | SFG-0300 | M00284 |
| GTMAX-3P5 | GTMAX-3P5-GR | GTMAX-3P5-URS | GTMAX-3P5-SPR | SFG-0300 | M00284 |
| GTMAX-35P80 | GTMAX-35P80-GR | GTMAX-35P80-URS | GTMAX-35P80-SPR | SFG-0350 | M00284 |
| GTMAX-4P160 | GTMAX-4P160-GR | GTMAX-4P160-URS | GTMAX-4P160-SPR | SFG-0400 | M00284 |
| GTMAX-35P40 | GTMAX-35P40-GR | GTMAX-35P40-URS | GTMAX-35P40-SPR | SFG-0350 | M00284 |
| GTMAX-4P120 | GTMAX-4P120-GR | GTMAX-4P120-URS | GTMAX-4P120-SPR | SFG-0400 | M00284 |
| GTMAX-35P10 | GTMAX-35P10-GR | GTMAX-35P10-URS | GTMAX-35P10-SPR | SFG-0350 | M00284 |
| GTMAX-35P5 | GTMAX-35P5-GR | GTMAX-35P5-URS | GTMAX-35P5-SPR | SFG-0350 | M00284 |
| GTMAX-4P80 | GTMAX-4P80-GR | GTMAX-4P80-URS | GTMAX-4P80-SPR | SFG-0400 | M00284 |
| GTMAX-4P40 | GTMAX-4P40-GR | GTMAX-4P40-URS | GTMAX-4P40-SPR | SFG-0400 | M00284 |
| GTMAX-5PXXS | GTMAX-5PXXS-GR | GTMAX-5PXXS-URS | GTMAX-5PXXS-SPR | SFG-0500 | M00284 |
| GTMAX-4P10 | GTMAX-4P10-GR | GTMAX-4P10-URS | GTMAX-4P10-SPR | SFG-0400 | M00284 |
| GTMAX-4P5 | GTMAX-4P5-GR | GTMAX-4P5-NRS | GTMAX-4P5-SPR | SFG-0400 | M00285 |
| GTMAX-5P160 | GTMAX-5P160-GR | GTMAX-5P160-NRS | GTMAX-5P160-SPR | SFG-0500 | M00285 |
| GTMAX-5P120 | GTMAX-5P120-GR | GTMAX-5P120-NRS | GTMAX-5P120-SPR | SFG-0500 | M00285 |
| GTMAX-5P80 | GTMAX-5P80-GR | GTMAX-5P80-NRS | GTMAX-5P80-SPR | SFG-0500 | M00285 |
| GTMAX-6PXXS | GTMAX-6PXXS-GR | GTMAX-6PXXS-URS | GTMAX-6PXXS-SPR | SFG-0600 | M00284 |
| GTMAX-5P40 | GTMAX-5P40-GR | GTMAX-5P40-URS | GTMAX-5P40-SPR | SFG-0500 | M00284 |
| GTMAX-6P160 | GTMAX-6P160-GR | GTMAX-6P160-URS | GTMAX-6P160-SPR | SFG-0600 | M00284 |
| GTMAX-5P10 | GTMAX-5P10-GR | GTMAX-5P10-URS | GTMAX-5P10-SPR | SFG-0500 | M00284 |
| GTMAX-5P5 | GTMAX-5P5-GR | GTMAX-5P5-URS | GTMAX-5P5-SPR | SFG-0500 | M00284 |

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| GTMAX Part Number | Replacement Gripper Assembly (Includes Spring) | Replacement Seal | Replacement Spring | Safety Gag | High Pressure Cap |
|-------------------|--|------------------|--------------------|------------|-------------------|
| GTMAX-6P120 | GTMAX-6P120-GR | GTMAX-6P120-URS | GTMAX-6P120-SPR | SFG-0600 | M00284 |
| GTMAX-6P80 | GTMAX-6P80-GR | GTMAX-6P80-URS | GTMAX-6P80-SPR | SFG-0600 | M00284 |
| GTMAX-6P40 | GTMAX-6P40-GR | GTMAX-6P40-URS | GTMAX-6P40-SPR | SFG-0600 | M00284 |
| GTMAX-6P10 | GTMAX-6P10-GR | GTMAX-6P10-URS | GTMAX-6P10-SPR | SFG-0600 | M00285 |
| GTMAX-6P5 | GTMAX-6P5-GR | GTMAX-6P5-URS | GTMAX-6P5-SPR | SFG-0600 | M00285 |
| GTMAX-8P160 | GTMAX-8P160-GR | GTMAX-8P160-URS | GTMAX-8P160-SPR | SFG-0800 | M00285 |
| GTMAX-8PXXS | GTMAX-8PXXS-GR | GTMAX-8PXXS-URS | GTMAX-8PXXS-SPR | SFG-0800 | M00285 |
| GTMAX-8P140 | GTMAX-8P140-GR | GTMAX-8P140-URS | GTMAX-8P140-SPR | SFG-0800 | M00285 |
| GTMAX-8P120 | GTMAX-8P120-GR | GTMAX-8P120-URS | GTMAX-8P120-SPR | SFG-0800 | M00285 |
| GTMAX-8P100 | GTMAX-8P100-GR | GTMAX-8P100-URS | GTMAX-8P100-SPR | SFG-0800 | M00285 |
| GTMAX-8P80 | GTMAX-8P80-GR | GTMAX-8P80-URS | GTMAX-8P80-SPR | SFG-0800 | M00285 |
| GTMAX-8P60 | GTMAX-8P60-GR | GTMAX-8P60-URS | GTMAX-8P60-SPR | SFG-0800 | M00285 |
| GTMAX-8P40 | GTMAX-8P40-GR | GTMAX-8P40-URS | GTMAX-8P40-SPR | SFG-0800 | M00285 |
| GTMAX-8P30 | GTMAX-8P30-GR | GTMAX-8P30-URS | GTMAX-8P30-SPR | SFG-0800 | M00285 |
| GTMAX-8P20 | GTMAX-8P20-GR | GTMAX-8P20-URS | GTMAX-8P20-SPR | SFG-0800 | M00285 |
| GTMAX-8P10 | GTMAX-8P10-GR | GTMAX-8P10-URS | GTMAX-8P10-SPR | SFG-0800 | M00285 |
| GTMAX-8P5 | GTMAX-8P5-GR | GTMAX-8P5-URS | GTMAX-8P5-SPR | SFG-0800 | M00285 |
| GTMAX-10P160 | GTMAX-10P160-GR | GTMAX-10P160-URS | GTMAX-10P160-SPR | SFG-1000 | M00285 |
| GTMAX-10P140 | GTMAX-10P140-GR | GTMAX-10P140-URS | GTMAX-10P140-SPR | SFG-1000 | M00285 |
| GTMAX-10P120 | GTMAX-10P120-GR | GTMAX-10P120-URS | GTMAX-10P120-SPR | SFG-1000 | M00285 |

Note: Replacement parts and accessories are available for all GripTight MAX Test Plugs. Contact EST Group Customer Service for more information.

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