



127mm Top Sub Booster Transfer Kit

TC-262

MAN-TC-262 (R01)

OWEN OIL TOOLS

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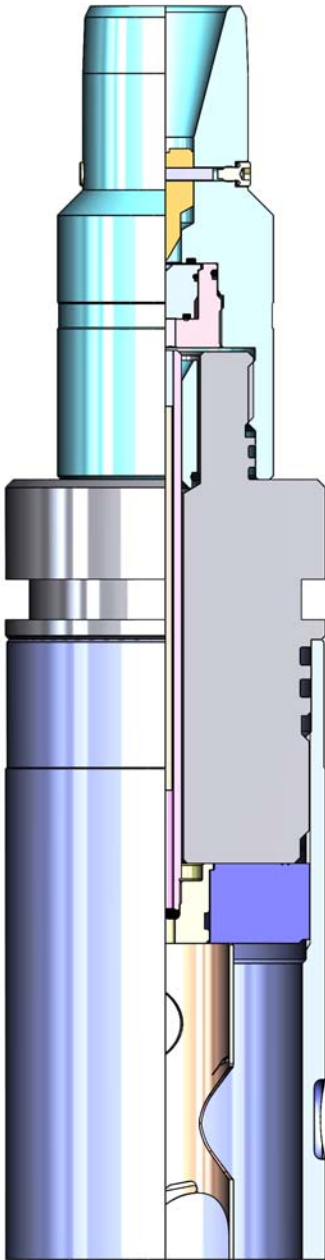
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Description

The 127mm Top Sub Booster Transfer Kit is designed to ensure accurate placement of a bi-directional HMX booster to an initiator within a Firing Head, in a 127mm gun system. This system ensures that detonation is efficiently transferred between the firing head and top sub in a tubing conveyed perforating string. This is accomplished by utilizing inserts fixed into the charge tube as well as a threaded booster holder to eliminate bending of the primacord. The booster is secured in place by retaining the detonating cord with an O-ring.

The kit consists of thermoplastic inserts for the alignment collar as well as seals and fasteners.

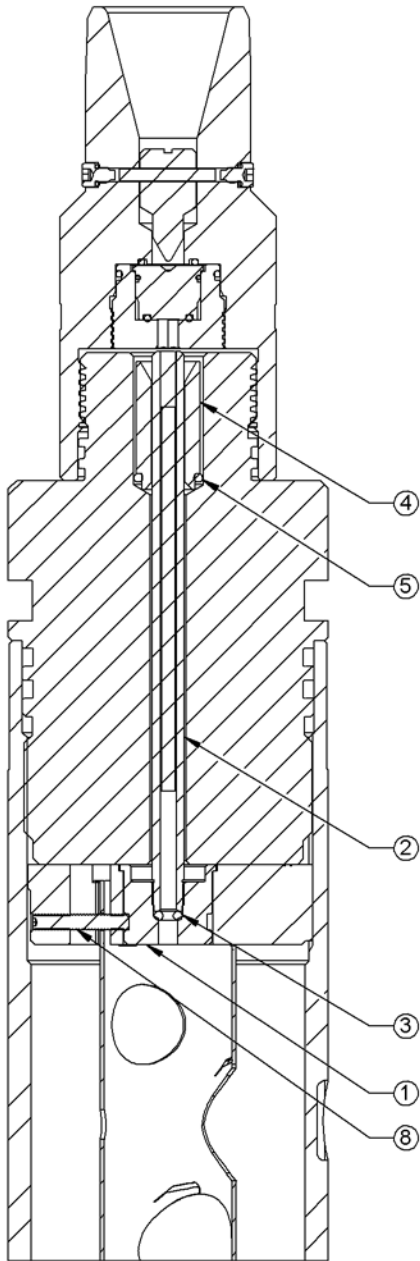
The kits are available for standard service up to 450°F (230°F) continuous working temperature.



Top Sub Booster Puck Chart

| Alignment Collar Insert | | |
|--------------------------------------|------------|-------------------------|
| Part No. | Strip Size | Alignment Collar Insert |
| | | Item 1 |
| TC-262-5000-127 | ALL | TC-261-0000-000 |
| All Kits contain a manual MAN-TC-262 | | |

127mm Top Sub Booster Transfer Kit



| Top Sub Booster Kit | |
|--------------------------------|------------------------------------|
| Part No. | Description |
| ^{1,2} TC-262-5000-127 | Alignment Collar Insert (Puck) Kit |
| ¹ TCP-0100-375 | Booster Kit |

Note:

1. TCP-0100-375 and TC-262-5000-127 must be ordered separately.
2. Contains Item 1. See Alignment Collar Insert Table below for details.

| Alignment Collar Insert | | |
|--------------------------------------|------------|-------------------------|
| Part No. | Strip Size | Alignment Collar Insert |
| | | Item 1 |
| TC-262-5000-127 | ALL | TC-261-0000-000 |
| All Kits contain a manual MAN-TC-262 | | |

| Booster Kit TCP-0100-375 | | |
|--------------------------|--------------|-------------------------|
| Item | Part No. | Description |
| 2 | TCP-0100-271 | Booster Tube 8.75" Long |
| 3 | OOO-N568-201 | O-Ring |
| 4 | TCP-0100-263 | Alignment Insert |
| 5 | OOO-N569-211 | O-Ring |

| Item | Part No. | Description |
|------|----------|--------------------------------------|
| 8 | 101329 | Set Screw SO 1/4"-20 UNC x 1.5" Long |

Item 8 - Shown for clarity - comes with Strip Assembly



Description

The Top Sub Booster Transfer Kit consists of the following components:

1 127mm Top Alignment Collar Insert Kit (TC-262-5000-127):

- 1 Alignment Collar Insert
- 1 MAN-TC-262

1 Basic Top Sub Booster Kit (TCP-0100-375) consists of the following:

- 1 Alignment Insert
- 1 Booster Tube
- 1 O-ring 201 - 70 Durometer
- 1 O-ring 211 - 90 Durometer

The purpose of the Alignment Collar Insert is to centralize the detonating cord and booster inside of the Charge Tube. The detonating cord is terminated at the end of the Booster Tube with a bi-directional booster. An O-ring is compressed between the Alignment Collar Insert and the Booster Tube, which holds the detonating cord in place.

The Alignment Collar Insert (Item 1) is a polyamide material which is virtually chemically inert and will not contribute significantly to the debris created by the gun detonation. Standard material is suitable for long term exposure to temperatures of 230°C (450°F).

Assembly Procedures

Load the Charge Tube as usual and ensure that there is an excess of detonating cord left at the top end of the Charge Tube. A minimum of 0.4 m (16 inch) should be left at the top of the gun. This excess is required for the proper installation of the Top Sub Booster Transfer Kit.

Remove all of the Top Sub Booster Transfer Kit items from the shipping pouch and compare them to the parts list to verify that the needed components are present.

Back out the 1 set screw (item 8) from the Alignment Collar just enough to allow installation of the insert. Slide the Alignment Collar Insert (item 1) over the detonating cord and into the Charge Tube. When the insert shoulders out, the groove on the insert will line up with the 3 set screws in the Alignment Collar.

Ensure the Alignment Collar key is aligned with the top charge hole in the strip and then re-tighten the set screw, which will hold the insert in place.

Slide the O-ring (item 4) over the detonating cord and into the Alignment Collar, pushing it in as far as possible. Cut the detonating cord to the same length that the Booster Tube (item 3) will stick out of the Alignment Collar Insert [approximately the length of the Booster Tube less 0.5 inch (12.5mm)]. Crimp the Booster onto the detonating cord. Insert the Booster and detonating cord into the Booster Tube, ensuring the Booster does not protrude out from the top end of the Booster Tube (item 3). Thread the Booster Tube into the Alignment Collar Insert until finger tight; ensuring the Booster is flush with the end of the Booster Tube. Thread the Top Sub into the Carrier. Put the O-ring (item 6) over the Alignment Insert (item 5) and carefully push the Alignment Insert into the bore in the top of the Top Sub.

