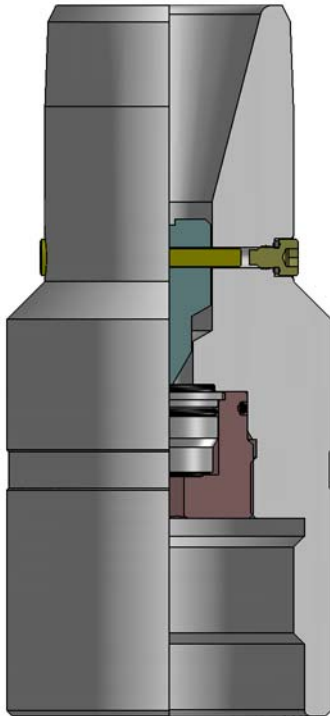


### Description



The Mechanical Firing Head is an economical TCP Firing Head which allows detonation of the gun system by releasing a Slim Nose Drop Bar into the tubing from surface. The Firing Pin is held in the bore of the Firing Head with a Shear Pin which is severed upon impact of the Slim Nose Drop Bar, allowing the Firing Pin to travel downward. The percussion transmitted to the Initiator causes detonation which is transferred to the Gun System.

The Firing Head is designed to use the CP Percussion Initiator. The Initiator is retained in the bottom of the Firing Head with an Initiator Retaining Nut which allows the Firing Head to be transported safely without any explosives installed. The top of the Firing Head features standard 8RD EUE Pin connections to thread into the tubing string as well as an integral No-Go profile which ensures that foreign objects do not accidentally fire the guns.

### Features and Benefits

- Connects directly to any gun system top sub with GO 2.750 Acme thread
- CP Percussion Initiator contains no lead azide and maintains differential pressure integrity even after detonation
- Allows easy handling on the rig floor
- Ensures that the Initiator may not be installed incorrectly, reducing the possibility of a misrun
- Integral No-Go feature ensures that foreign objects dropped into the tubing may not detonate the gun. Initiator may be installed at the rig so the Firing Head is not transported with explosives installed
- May be used in snubbing applications
- At least one full tubing joint filled with fluid directly on top of the Firing Head is recommended for optimum drop bar impact

**Note:**

this Mechanical Firing Head does not comply with API-RP-67, Section 6.4.2. This tool should only be used when no other tool will satisfy job requirements and a procedure has been established to prevent accidental

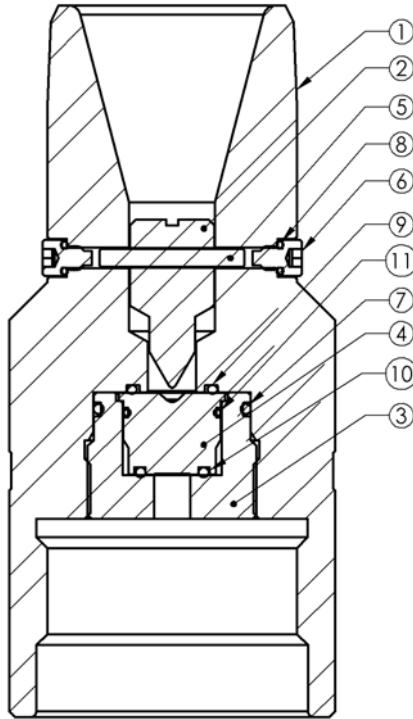
	2-3/8 in (60.3 mm)		2-7/8 in (73.0 mm)		3-1/2 in (88.9 mm)	
Maximum OD	3.375 in	85.7 mm	3.375 in	85.7 mm	4.500 in	114.0 mm
Minimum ID	0.875 in	22.2 mm	0.875 in	22.2 mm	0.875 in	22.2 mm
Overall Length	7.4 in	188 mm	7.8 in	198 mm	8.8 in	223 mm
Max Pressure <sup>2</sup>	20,000 psi	137.9 MPa	20,000 psi	137.9 MPa	20,000 psi	137.9 MPa
Tensile	55,200 lb	24 550 daN	79,400 lb	35 300 daN	90,400 lb	40 200 daN
Max Temp <sup>1</sup>	250°F (121°C)					
Connections	2-3/8 in (60.3 mm) EU Pin GO 2.750 ACME Box		2-7/8 in (73.0 mm) EU Pin GO 2.750 ACME Box		3-1/2 in (88.9 mm) EU Pin GO 2.750 ACME Box	
Product Number	TC-011-2375-000		TC-011-2875-000		TC-011-3500-000	
Redress Kit	TC-011-2375-099		TC-011-2875-099		TC-011-3500-099	

<sup>1</sup>The maximum temperature can be increased to 450° (230°C) by substituting the 90 durometer Nitrile O-rings with 90 durometer Viton O-rings. Refer to the Time vs Temperature chart for Explosives to confirm any explosives requirements

<sup>2</sup>The maximum pressure is determined by the maximum allowable pressure differential of Initiator

Mechanical Firing Head  
Econo Style

MAN-TC-011



Item	Part Number	Qty	Description
--	<b>TC-011-2375-000</b>	--	<b>Mechanical Firing Head 2-3/8" EU</b>
1	TC-011-0000-000	1	Firing Head Body 2-3/8" EU
2	TC-011-0001-000	1	Firing Pin f/Mechanical Firing Head
3	TC-011-0002-000	1	Initiator Retaining Nut
4	Reference	1	Percussion Detonator
5	PF-100-0188-150B	1	Brass Shear Pin (OD 0.188", 1.50 LG)
6	SF-050-025F-050S	2	Shear Screw 1/4" - 28 UNF x 0.5 LG.
7	OOO-N569-127	1	O-Ring 90 Durometer Nitrile
8	OOO-N569-009	2	O-Ring 90 Durometer Nitrile
9	OOO-N569-116	1	O-Ring 90 Durometer Nitrile
10	OOO-N569-113	1	O-Ring 90 Durometer Nitrile
11	OOO-N569-020	1	O-Ring 90 Durometer Nitrile
---	PF-074-0000-000	1	Tube Nut P/N TN-66
---	TC-011-2375-098	1	Redress Kit for Mechanical Firing Head 2-3/8" EU (without Firing Pin)
---	TC-011-2375-099	1	Redress Kit for Mechanical Firing Head 2-3/8" EU
---	MAN-TC-011	1	Assembly Manual

Item	Part Number	Qty	Description
--	<b>TC-011-2875-000</b>	--	<b>Mechanical Firing Head 2-7/8" EU</b>
1	TC-011-0003-000	1	Firing Head Body 2-7/8" EU
2	TC-011-0001-000	1	Firing Pin f/Mechanical Firing Head
3	TC-011-0002-000	1	Initiator Retaining Nut
4	Reference	1	Percussion Detonator
5	PF-100-0188-150B	1	Brass Shear Pin (OD 0.188", 1.50 LG)
6	SF-050-025F-050S	2	Shear Screw 1/4" - 28 UNF x 0.5 LG.
7	OOO-N569-127	1	O-Ring 90 Durometer Nitrile
8	OOO-N569-009	2	O-Ring 90 Durometer Nitrile
9	OOO-N569-116	1	O-Ring 90 Durometer Nitrile
10	OOO-N569-113	1	O-Ring 90 Durometer Nitrile
11	OOO-N569-020	1	O-Ring 90 Durometer Nitrile
---	PF-074-0000-000	1	Tube Nut P/N TN-66
--	MAN-TC-011	1	Assembly Manual
--	TC-011-2375-098	1	Redress Kit, Mechanical Firing Head 2-7/8" EU (without Firing Pin)
--	TC-011-2375-099	1	Redress Kit for Mechanical Firing Head 2-7/8" EU

Item	Part Number	Qty	Description
--	<b>TC-011-3500-000</b>	--	<b>Mechanical Firing Head 3-1/2" EU</b>
1	TC-011-0004-000	1	Firing Head Body 3-1/2" EU
2	TC-011-0001-000	1	Firing Pin f/Mechanical Firing Head
3	TC-011-0002-000	1	Initiator Retaining Nut
4	Reference	1	Percussion Detonator
5	PF-100-0188-150B	1	Brass Shear Pin (OD 0.188", 1.50 LG)
6	SF-050-025F-050S	2	Shear Screw 1/4" - 28 UNF x 0.5 LG.
7	OOO-N569-127	1	O-Ring 90 Durometer Nitrile
8	OOO-N569-009	2	O-Ring 90 Durometer Nitrile
9	OOO-N569-116	1	O-Ring 90 Durometer Nitrile
10	OOO-N569-113	1	O-Ring 90 Durometer Nitrile
11	OOO-N569-020	1	O-Ring 90 Durometer Nitrile
---	PF-074-0000-000	1	Tube Nut P/N TN-66
--	MAN-TC-011	--	Assembly Manual
--	TC-011-2375-098	--	Redress Kit, Mechanical Firing Head 3-1/2" EU (without Firing Pin)
--	TC-011-2375-099	--	Redress Kit for Mechanical Firing Head 3-1/2" EU

Part Number	Qty	Description
<b>TC-011-2375-098</b>	--	<b>Redress Kit for Mechanical Firing Head 2-3/8", 2-7/8", &amp; 3-1/2" EU (without Firing Pin)</b>
OOO-N569-020	1	O-Ring 90 Durometer Nitrile
OOO-N569-113	1	O-Ring 90 Durometer Nitrile
OOO-N569-116	1	O-Ring 90 Durometer Nitrile
OOO-N569-127	1	O-Ring 90 Durometer Nitrile
PF-074-0001-000	1	Tube Nut P/N TN-66
PF-100-0188-150B	1	Brass Shear Pin (OD 0.188", 1.50 LG)
OOO-N569-009	2	O-Ring 90 Durometer Nitrile
SF-050-025F-050S	2	Shear Screw 1/4" - 28 UNF x 0.5 LG.

Part Number	Qty	Description
<b>TC-011-2375-099</b>	--	<b>Redress Kit for Mechanical Firing Head 2-3/8", 2-7/8" &amp; 3-1/2" EU</b>
OOO-N569-020	1	O-Ring 90 Durometer Nitrile
OOO-N569-113	1	O-Ring 90 Durometer Nitrile
OOO-N569-116	1	O-Ring 90 Durometer Nitrile
OOO-N569-127	1	O-Ring 90 Durometer Nitrile
PF-074-0001-000	1	Tube Nut P/N TN-66
PF-100-0188-150B	1	Brass Shear Pin (OD 0.188", 1.50 LG)
TC-011-0001-000	1	Firing Pin f/Mechanical Firing Head
OOO-N569-009	2	O-Ring 90 Durometer Nitrile
SF-050-025F-050S	2	Shear Screw 1/4" - 28 UNF x 0.5 LG.

**Note: Redress Kits, TC-011-2375-098 and TC-011-2375-099 are not included**