

MECHANICAL AUTO GUN RELEASE FIRING HEAD ASSEMBLY

DESCRIPTION

The GEODynamics Mechanical Auto Gun Release Firing Head is used to initiate the detonation of the Tubing Conveyed Perforating gun mechanically and to automatically release the guns immediately after detonation. The automatic release is activated by a pressure wave generated by gun gas pressure after the perforating gun has detonated. The GEODynamics Mechanical Auto Gun Release Firing Head incorporates a built in 1.50" ID Safety No-Go.

ADVANTAGES

- Safe, economical, simple and reliable
- Uses industry standard initiators
- Easily converts to an absolute pressure auto gun release firing head
- Eliminates the need for a wireline run to activate a mechanical tubing release
- Can be run with a completion string saving rig time

PRECAUTIONS

- A ported sub, debris or ported underbalance sub, should be run in conjunction with this tool to allow the pressure to equalize across the tool. If the well is shot underbalance and there is no ported sub above the AGR a pressure differential will be created. The pressure differential acting on the bottom of the TCP gun could cause the BHA not to release.
- If it is determined that the guns have not detonated the drop bar **MUST BE** retrieved prior to pulling the guns out of the hole

OPERATION

A drop bar is released from surface down the work string. When the drop bar impacts the firing pin the firing pin in turn strikes the initiator, initiating the explosive train. A pressure wave generated by the detonation of the perforating gun acts on the piston inside the Auto Gun Release. The piston shifts up disengaging the ball bearings in turn releasing the guns into the rat hole. The Mechanical Auto Gun Release Firing Head incorporates a 1.50" Safety No-Go that protects the firing pin from accidental detonation. The No-Go also aids in guiding the drop bar to the firing pin.

SPECIFICATIONS

DESCRIPTION	2-3/4	3-1/8	4.0
TOP CONNECTION	2 3/8 in	2 3/8 in	2 7/8 in
BOTTOM CONNECTION	ACME BOX	ACME BOX	ACME BOX
MAXIMUM O.D.	3 3/8 in	3-3/8 in	4.0 in
MINIMUM I.D. AFTER RELEASE	2.25 in	2.25 in	2.25 in
LENGTH	14.0 in	14.0 in	14.0 in
WEIGHT	18 lbs	21 lbs	24 lbs
PART NUMBER	12.MAGA.234.23BP	12.MAGA.318.23BP	12.MAGA.400.27BP

