

Hi-Force HYDRAULIC TOOLS		OPERATING AND MAINTENANCE INSTRUCTIONS HYDRAULIC NUT SPLITTERS - NS RANGE			TDS:- 1356
Prepared by:-	Matthew Hughes		Approved by:-	Mark Dalley	
REV NO:-	002	003			Date: 12/12/12
ECO:-	3978	4250			Date: 01/08/14

The Hi-Force NS range of hydraulic nut splitters offers a choice of 5 models suitable for hexagon nut AF sizes from 17 to 75mm (M10 to M48 bolt sizes). The nut splitters are designed to easily split corroded nuts up to RC44 hardness, Hi-Force nut splitters offer the ideal 'cold cut' solution for removing worn or corroded fasteners, especially in applications where 'hot work' permits are not allowed

IMPORTANT NOTE: The NS range of nut splitters are for use on heavy duty nuts, where the nut height is equal to or greater than two thirds of the blade length of the tool being used.

Before operating your Hi-Force NS series nut splitter check in the table below for the correct capacity to suit the nuts to be cut.

MODEL NO.	HEX SIZES (mm)	THREAD SIZES (mm)
NS 104	17-32	M10-M22
NS 110	32-41	M22-M27
NS 200	41-50	M27-M33
NS 206	50-60	M33-M39
NS 215	60-75	M39-M48

SAFETY

READ THESE INSTRUCTIONS AND SAFETY WARNINGS FULLY

FAILURE TO DO SO COULD RESULT IN DEATH, PERSONAL INJURY OR EQUIPMENT DAMAGE

TAKE CARE WHEN OPERATING NUTSPLITTERS TO ENSURE THAT ALL BODILY PARTS ARE CLEAR OF THE CUTTING AREA.

ALWAYS WEAR SUITABLE EYE PROTECTION AS SPLINTERS MAY FLY.

GLOVES AND SAFETY FOOTWEAR ARE ALSO ADVISABLE.

When connecting hose lines to your Hi-Force NS range nut splitter **ALWAYS** ensure that hoses and couplings are **CLEAN, SECURELY FASTENED** and of **CORRECT PRESSURE RATING** for the Nut Splitter i.e. 700Bar working pressure with a **4:1 FACTOR OF SAFETY**.

ALWAYS ensure couplers are **FULLY TIGHTENED BY HAND**, the most common reason why the nut splitter blade fails to advance when operated is because the coupler has not been properly cleaned and is not fully connected to the nut splitter.

ALWAYS check that the hydraulic pump to be used with the nut splitter is of sufficient pressure capacity (700 Bar) and has a sufficient quality of clean, compatible oil in the reservoir.

Hi-Force hydraulics manufacture a wide range of manual, air powered, electric and petrol engine driven hydraulic pumps suitable for use with Hi-Force NS nut splitters. Ask your local Hi-Force distributor for further details or consult Hi-Force hydraulics direct.


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Fig 1

NS104 & NS110 Models NS200, NS206 & NS215 Model

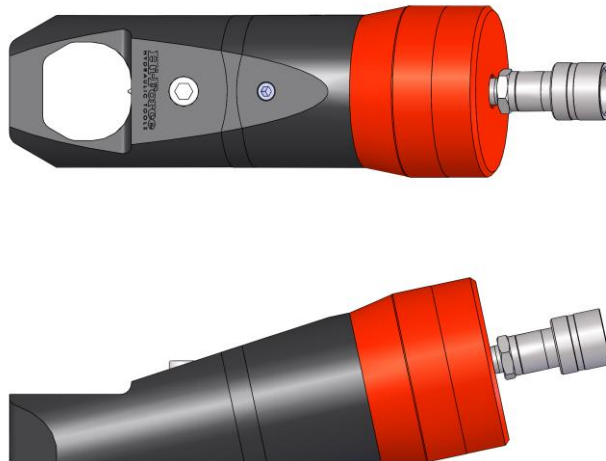
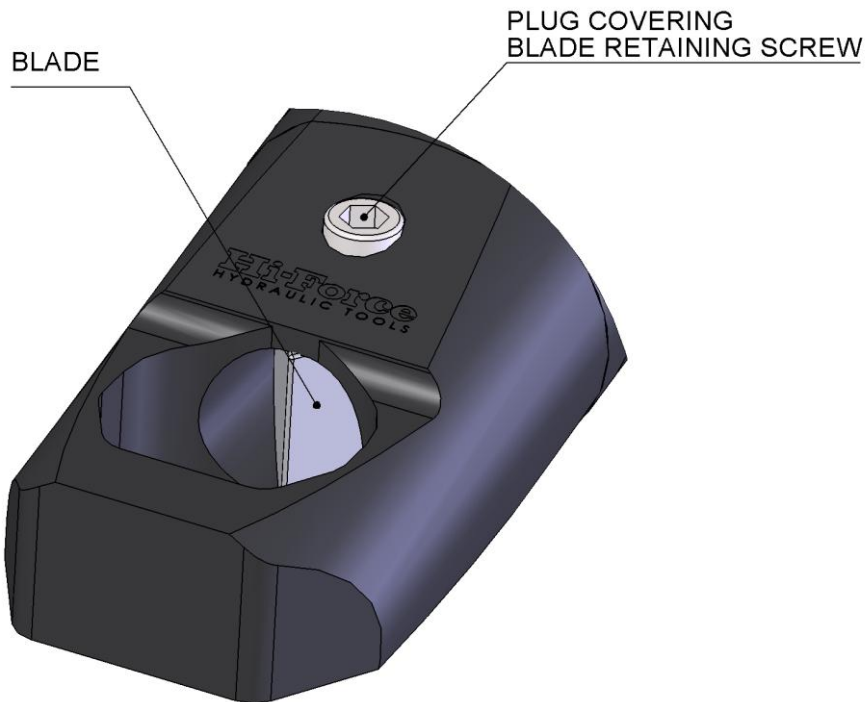



Fig 2

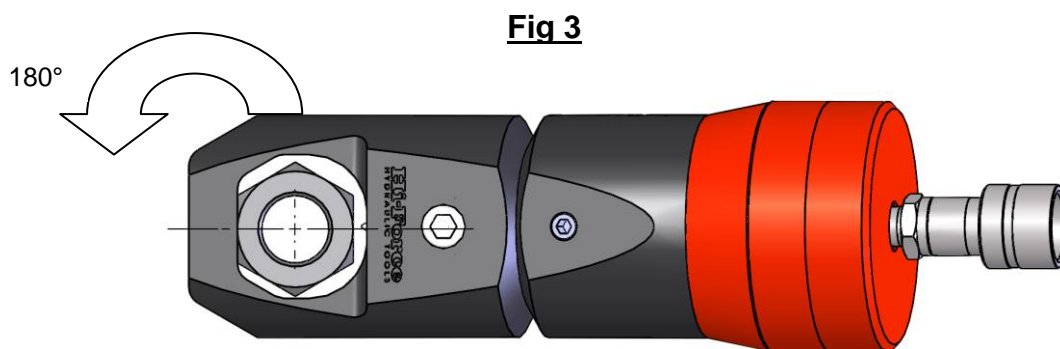


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OPERATION

Place the nut splitter over the nut to be cut so that the blade is aligned with the centre of one flat of the nut. Never try to cut on a corner of the nut. Operate the pump whilst holding the nut splitter in position. Stop the pump when the nut is cut through to avoid damage to the bolt. Retract the blade by opening the release valve on the pump.

If the nut cannot be removed after one cutting operation, reposition the nut splitter 180° from the first cut and make a second cut (Fig 3).



CARE AND MAINTENANCE

After completing each cutting operation **ALWAYS** clean any debris from around the cutting blade and cutter jaw. This will greatly reduce the possibility of blade jamming.

After a period of operation, depending on the material being cut, the Blade may develop a slight 'Roll Burr' along the cutting edge. This 'Roll Burr' can be easily removed by using a knife sharpening stone, which should always be applied to the **FLAT SIDES** of the Blade.

Nut splitter blades can be replaced by firstly retracting the blade fully and removing the plug in the top of the nut splitter body (see Fig 2). This provides access to the blade retaining screw, which can then be loosened, and the blade pulled from the end of the piston. Care should be taken when carrying out this operation to prevent injury from the blade particularly when fitting a replacement. Refitting is the reverse procedure taking care to ensure the blade retaining screw is correctly tightened. **THIS OPERATION SHOULD BE CARRIED OUT WITH THE NUT SPLITTER DISCONNECTED FROM THE PUMP.**

Always use genuine Hi-Force hydraulic oil. The use of other fluids may invalidate your warranty.

After use, always fully retract the tool. When hoses are disconnected, always fit dust caps to couplers.

Protect tools from the elements when not in use. If storing for prolonged periods, grease exposed metal parts. **Never** store the tool with the blade extended.

To protect your warranty, have your cylinder serviced and repaired by an authorised Hi-Force repairer. Only use genuine Hi-Force spare parts. Spare parts sheets can be downloaded from our website www.hi-force.com.

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