



Certificate No. TW-HSPM-1237



ISO 9001:2000



ISO 14001:2004

KuDos Mechanical Co., Ltd.

Safe Operation & Maintenance Instructions

Hydraulic Nut Splitter

HYNC Double Chisel Series



Version: 07/2014

KuDos® Hydraulic Compression Heads are carefully inspected for quality and tested for safety. We follow ISO 9001: 2008/ ISO 14001: 2004/ IECQ QC 080001/ OHSAS 18001: 2007 & CE Standards

ATTENTION!

Safe Operation & Maintenance Instructions must be followed.



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Thank you for using **KuDos®** products. This manual must be read carefully prior to operating this product. Special attention should be paid to the section “Safety Instructions”. Damages and injuries caused by improper use of this product are **NOT** included in our warranty. We would like to remind you to work safely and to keep this manual on hand.

Safety Instructions

- Follow ALL instructions to ensure safety.





WARNING	
	Read all information regarding your hydraulic power source and be familiar with its operation.
	To avoid injury keep hands and feet away from the tool and workpiece during operation.
ATTENTION	
	Do not use this tool on glass, plastic, wood or any other materials which could shatter. Do not exceed equipment ratings.
	Always wear safety goggles when operating this product. Projectiles or hydraulic fluid can cause serious injuries.

Table of Components

Part No.	Qty.	Part Name
1	1	Cylinder Cup
2	1	Oil Seal
3	1	Screw
4	1	Piston
5	1	Spring
6	1	Key
7	1	Chisel
8	1	Screw
9	1	Main Body
10	1	Chisel
11	1	Screw

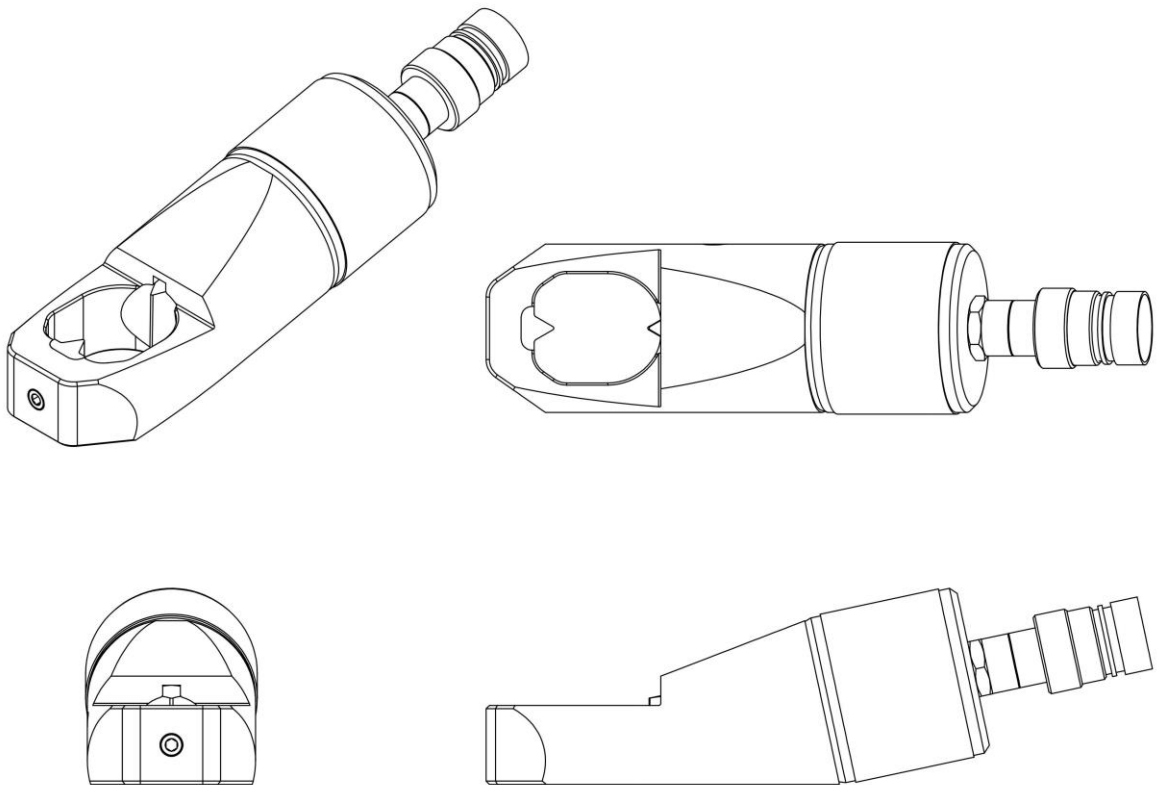
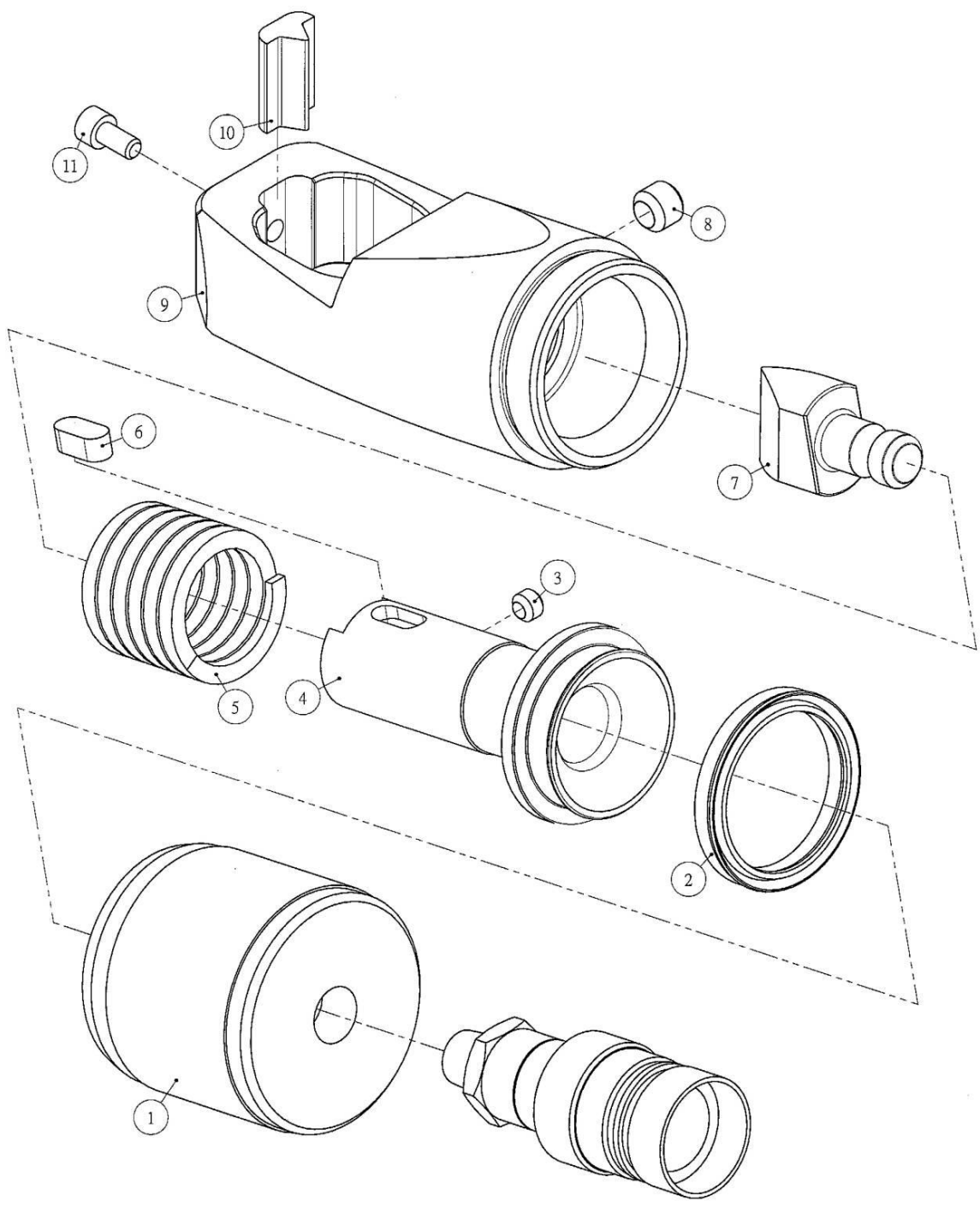
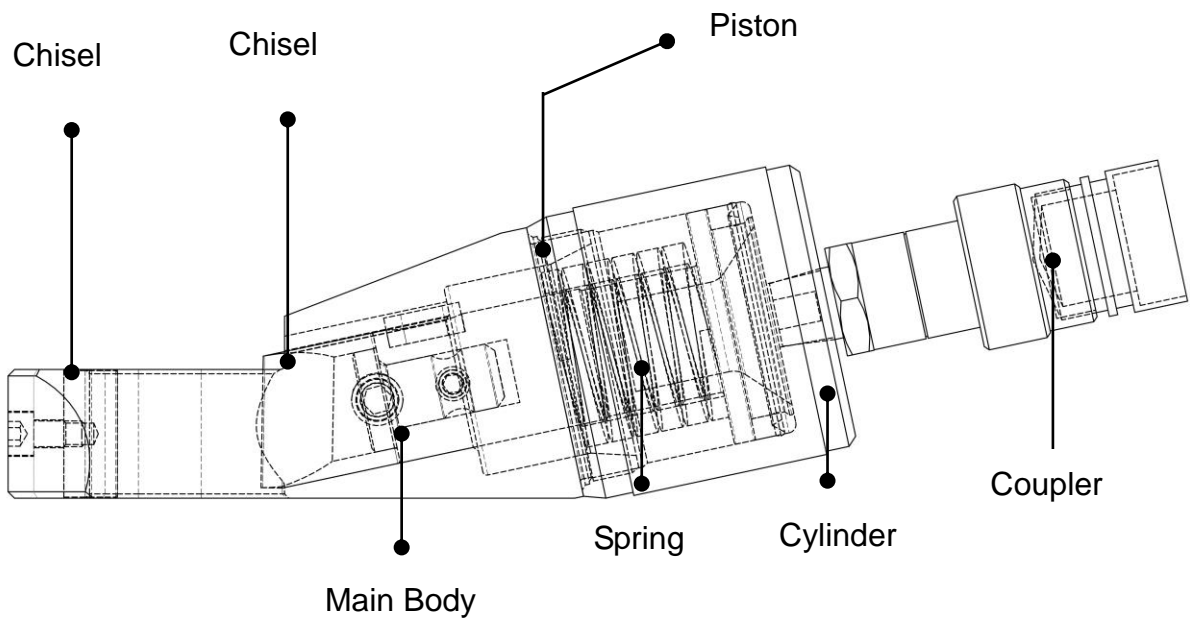


Diagram of Components



Product Description

■ Subassembly



FEATURES:

1. Easy to Use and Unique angle head design with double blades for a variety of applications
2. Single Action Cylinder with hydraulic advance with spring return.
3. Two blades design for easy to use and time saving.
4. Closed type head design to avoid any slip caused when splitting the nuts.
5. Operated by any hydraulic pump with related oil pressure of 700bar/10,000psi.



Limited Lifetime Warranty

- Kudos hydraulic products are warrantied against defects in materials and workmanship for the life of the product. This is defined as that point in time when the product no longer functions due to normal wear.
- This warranty is subject to the following exclusions and limitations:
 1. This warranty does not cover damages to products which are not installed, operated, used and maintained in accordance with written instructions.
 2. This warranty does not cover products that have been worn out, damaged by improper storage, damaged or otherwise altered, or from disassembly or attempted disassembly by parties other than **KuDos®** or its authorized service representatives.
 3. This warranty does not cover damages caused by the use of components not manufactured or authorized by **KuDos®**, acts of God, accidents, or use in a manner for which they are not intended.
- **KuDos®**'s liability in all cases is limited to, and shall not exceed, the purchase price paid. Kudos shall not be liable to any buyer for consequential or incidental damages of any kind.
- Batteries, chargers, electric motors, gas engines and cutting blades sold with Kudos products are not covered by this warranty. All electric motors and gas engines are seperately warrantied by the manufacturer.
- Receipt and warranty card are required for warranty services.
- If the tool is found to be defective, in our sole judgement, Kudos will either repair or replace the defective product or part.
- All revisions in warranty policy and product informations will be included in future versions of our manuals. Copies of this warranty are available from the factory upon request.

Trouble-Shooting

■ Failure to split nuts:

4. The hardness or size of applied nuts might exceed equipment ratings.
4. The chisel is worn or damaged and must be replaced. Splitting nuts with a worn or damaged chisel might cause property damage or even personal injury.
4. The pump output might be insufficient.
4. Internal leakages of hydraulic fluid: Contact your KuDos® service representatives.

■ Insufficient operating pressure: (less than 700bar or 10,000psi)

1. Secure the couplers properly to prevent restricted oil flow.
2. Inspect the pump output for possible pressure losses. Do not use your fingers when looking for fluid leaks.
3. Test the pump to ensure it reaches 700 bar pressure. Never adjust the pump relief valve over 700 bar.

■ Replace any worn or damaged parts immediately, especially the chisels. Do not use parts not supplied by Kudos.


■ Contact KuDos® service representatives to request parts or for problems not shown above.

■ Do NOT attempt to disassemble or repair the product.

■ Kudos hydraulic tools must be serviced by a qualified technician. Contact your Kudos® representative for more information.

Maintenance

- Keep the tool head free of dirt and metal chips. Use a lubricant to clean the tool when necessary.
- Routine application of rust preventive oil to the product is needed. Avoid bringing the tool into contact with water or solvents.
- Routine renewal of pump oil is required. Particles mixed in the pump oil is the most common cause of product failure.
- Do **NOT** lift the tool by the hydraulic hose or couplers, or let the tool drop to the ground or into the carrying case.
- Do **NOT** keep this product in places with high temperatures, high humidity, or direct sunlight.
- Suggested working temperatures : -10°C ~ 40°C. Check hydraulic fluid specifications.
- Hydraulic fluid temperatures over 65°C might soften packings and seals and cause fluid leaks.
- The hydraulic fluid pressure should only be adjusted by **KuDos®** service representatives.
- Inform **KuDos®** authorized distributors in case of any abnormalities or malfunctions of the product.
- **DO NOT DISASSEMBLE OR ATTEMPT TO REPAIR THIS TOOL.**

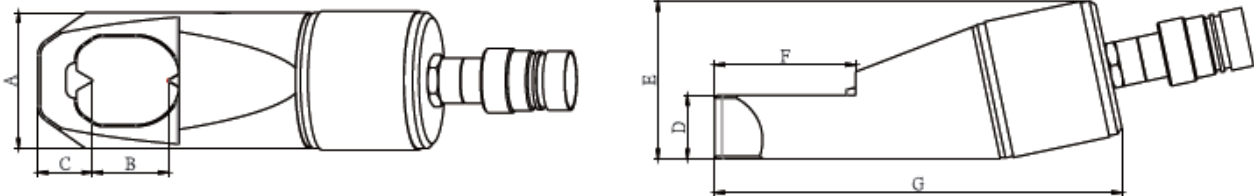
ATTENTION	
	<ul style="list-style-type: none">• Release pressure from the system before servicing.• Kudos hydraulic tools must be serviced by a qualified technician.

Model Specifications

■ Specifications: Double Blade

Model No.	Bolt Range	Hex Nut Range (mm)	Capacity (ton)	Oil Capacity (cm ³)	Dimensions (mm)			Net Weight (kg)	Gross Weight (kg)
					Length	Width	Height		
HYNC-1319D	M6-M12	10-19	5	15	223	44	67	1.3	2.8
HYNC-1924D	M12-M16	19-24	10	20	250	56	74	2.4	3.8
HYNC-2432D	M16-M22	24-32	15	60	275	64	78	3.5	5.4
HYNC-3241D	M22-M27	32-41	20	80	305	77	90	5.1	7.2
HYNC-4150D	M27-M33	41-50	35	155	344	97	111	9.7	13.8
HYNC-5060D	M33-M39	50-60	50	240	386	115	131	14.7	18.6
HYNC-6075D	M39-M48	60-75	90	492	476	170	186	40.7	42.9

■ Dimensions:



Unit: mm

Model No.	A	B	C	D	E	F	G	Spare Chisels No.	
HYNC-1319D	40	21	18	19	53	41	139	HYNC-1319D #7、#10	Chisel
HYNC-1924D	54	26	22	25	66	50	168	HYNC-1924D #7、#10	Chisel
HYNC-2432D	64	34	26	30	78	65	198	HYNC-2432D #7、#10	Chisel
HYNC-3241D	77	43	31	36	90	80	231	HYNC-3241D #7、#10	Chisel
HYNC-4150D	94	52	39	45	111	93	271	HYNC-4150D #7、#10	Chisel
HYNC-5060D	106	32	43	54	131	107	315	HYNC-5060D #7、#10	Chisel
HYNC-6075D	156	77	54	75	186	133	411	HYNC-6075D #7、#10	Chisel

■ **Caution** : Only suitable for ≤ grade 8 nuts, splitting of stainless, square, and / or star nuts are prohibited. Nut hardness must not exceed HRC-44.



■ Accessories

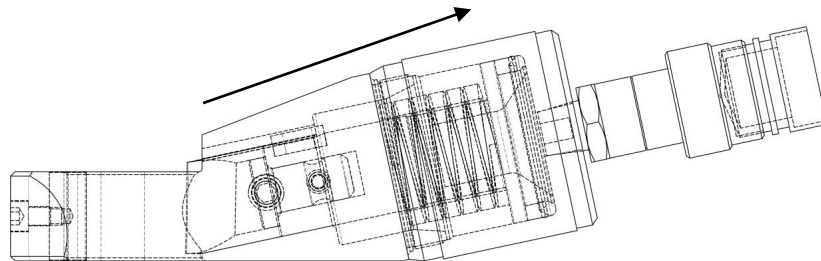
Model No.	Hex Wrench (mm)	Packaging
HYNC-1319	2.5 & 4	KuDos® Plastic Carrying Case
HYNC-1924	3 & 5	
HYNC-2432	4 & 6	
HYNC-3241	4 & 6	
HYNC-4150	4 & 6	
HYNC-5060	5 & 6	
HYNC-6075	5 & 6	Crate

Model No.	Hex Wrench (mm)	Packaging
HYNC-1319D	2.5 & 4	KuDos® Plastic Carrying Case
HYNC-1924D	3 & 5	
HYNC-2432D	4 & 6	
HYNC-3241D	4 & 6	
HYNC-4150D	4 & 6	
HYNC-5060D	5 & 6	
HYNC-6075D	5 & 6	Crate



Operating Instructions

1. Connect the pump hose and splitter couplers. Firmly tighten the couplers to prevent restricted oil flow between the pump and the hydraulic tool head.
2. To remove air trapped in the hydraulic system, operate the pump to advance and retract the chisel several times.
3. Retract the piston and the chisel. The product is now ready to operate.



WARNING

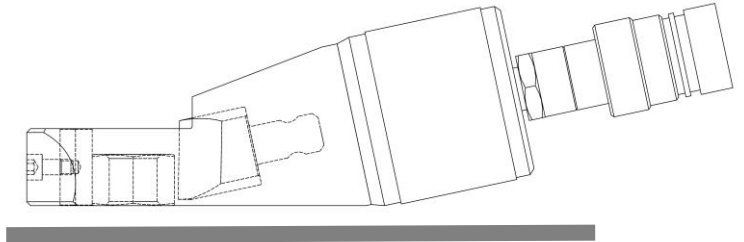


- Do not cut chains or bolts.
- Do not use the nut splitter to rotate nuts.
- Do not move the tool during operation.
- Do not heat up nuts with the nut splitter in position.

Operating Instructions

1. Position the splitter on the nut. Make sure the nut is squared nicely at the top of the splitter tool head. Improper positioning of the splitter on the nut might cause damages to the chisel.

The flat surface of the splitter must rest flush (90°) against one of the nut flats, and the head must rest on a flat surface.

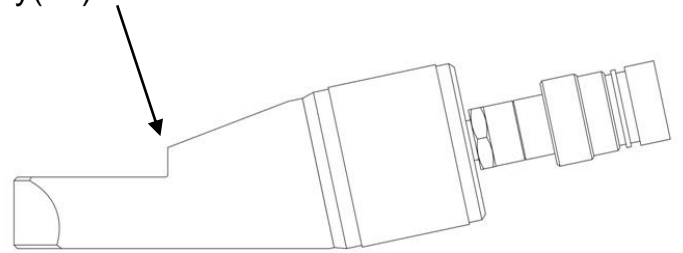


2. Hold the splitter in place and operate the pump until the chisel cuts through the nut. Stop the pump immediately after the nut is split to avoid damages to the bolt threads.
3. Retract the chisel and lift the splitter off the nut.
4. If the nut cannot be removed after one cut, position the splitter on the side opposite (180°) the first split and the operation repeated.
5. Turn off the pump after the nut is split and the chisel is retracted completely.
6. Dismount the couplers and the hose and replace the dustcaps to all couplers. If the couplers cannot be dismounted, release the internal pressure from the pump.

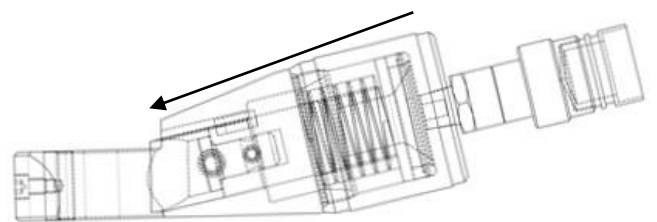
Chisel Replacement - Removal

1. Remove the set screw (#8) & top screw (#11) from the side of the Main Body(#9).

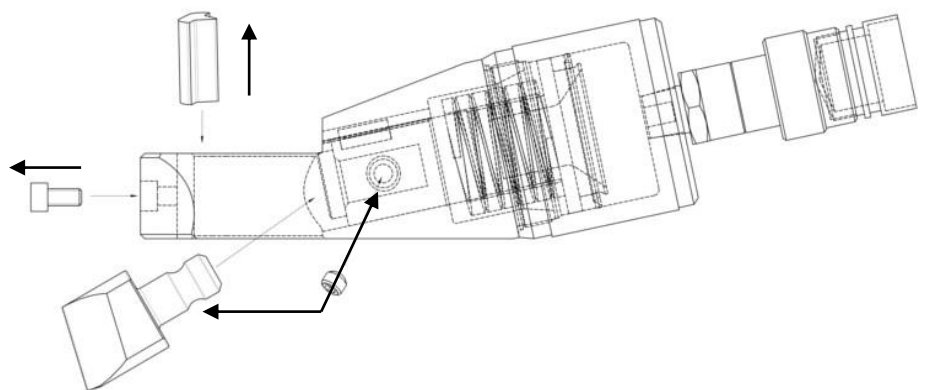
Refer to the page of component list for the specifications of wrenches and screws for all models of splitters.



2. Remove top chisel(#10), then Operate the pump to advance the chisel until fully extended.



3. Remove the smaller set screw (#3) from the same hole in the side of the Main Body (#9).
4. Retract the piston to separate the chisel from the piston. Pull the chisel out of the Main Body.



ATTENTION	
	Proper wrenches with correct specifications are required for replacing chisels, or the product might be damaged.

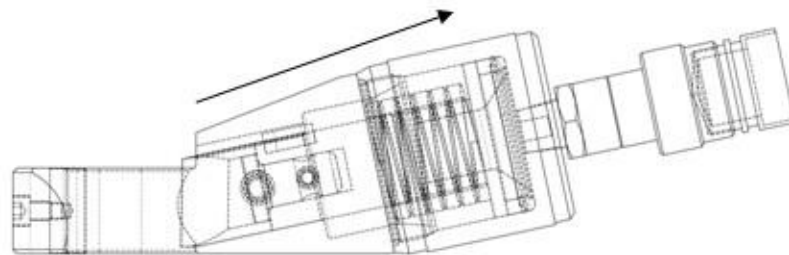
Chisel Replacement - Installation

5. Advance the cylinder piston until fully extended. Place the chisel in the cylinder and align it to the correct position. Insert the small setscrew (#3) and tighten.



- The setscrew must be tightened firmly, or the chisel may perform improperly.

6. Retract the piston and the chisel(#7). Insert the larger setscrew (#8) and tighten, then insert new chisel(#10) and tighten locating screw(#11)



7. Check the splitter and cylinder action by advancing and retracting the chisel several times.

NOTE:

If the piston cannot be retracted after the chisel is replaced :

- The setscrew #3 might not be tightened firmly enough, or the replaced chisel is misaligned with the piston, interfering with the motion of the piston. Remove the setscrews and repeat steps 6~8 to reinstall the chisel.
- A squeal of metal while advancing or retracting the piston indicates that the setscrew #3 may be over-tightened and interfering with the motion of the piston. Adjust setscrew #3 so the piston will not be scratched.



Manufacture & Quality Certificate

We hereby certify that the following **KuDos®** product was manufactured in accordance with our specifications and has passed our quality inspection.

Item: Double Blade Nut Splitter

Model No: HYNC-1319D HYNC-1924D HYNC-2432D

HYNC-3241D HYNC-4150D HYNC-5060D

HYNC-6075D

Serial No. _____

Date of Inspection: _____

Q.C. Supervisor: _____

KuDos Mechanical Co., Ltd

For KuDos Authorized
Distributor Use Only:

For Industry or Individual
Buyer Use Only

_____/_____/_____
Date of Purchase (dd/mm/yy)

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Date of Purchase (dd/mm/yy)