ENERPAC®
A UNIT OF APPLIED POWER INC.

Instruction Sheet

HYDRAULIC NUT SPLITTERS

NC-1319, NC-1924, NC-2432, NC-3241, NC-4150, NC-5060, NC-6075

L-1453 Rev. A 4/97

IMPORTANT RECEIVING INSTRUCTIONS

Visually inspect all components for shipping damage. If any shipping damage is found, notify carrier at once. Shipping damage is NOT covered by warranty. The carrier is responsible for all repair or replacement costs resulting from damage in shipment.

SAFETY INFORMATION

To avoid personal injury or property damage during system operation, read and follow all CAUTIONS, WARNINGS, and INSTRUCTIONS included with or attached to each product. ENERPAC CANNOT BE RESPONSIBLE FOR DAMAGE OR INJURY RESULTING FROM UNSAFE USE OF PRODUCT, LACK OF MAINTENANCE, OR INCORRECT PRODUCT AND SYSTEM APPLICATION. Contact Enerpac when in doubt as to applications and safety precautions.

⚠ WARNING

To avoid personal injury, always wear proper personal protective gear when operating hydraulic equipment.

⚠ WARNING

The system operating pressure must not exceed the pressure rating of the lowest rated component in the system.

⚠ WARNING

Make sure that all system components are protected from external sources of damage, such as excessive heat, flame, moving machine parts, sharp edges, and corrosive chemicals.

⚠ WARNING

To prevent injury, do not place fingers on or near the cutting blade while the nut splitter is operating.

⚠ WARNING

To prevent injuries and avoid damage to the cutters, do not use the nut splitter on glass, plastic, wood, or any other material which could shatter.

⚠ CAUTION

To avoid damage to the nut splitter blade, housing, plunger and seals:

(a) Do not cut chains or bolts.

(b) Do not use the nut splitter to rotate nuts.

(d) Do not move the nut splitter during the cutting operation.

(e) Do not heat up nuts while the nut splitter is in position.

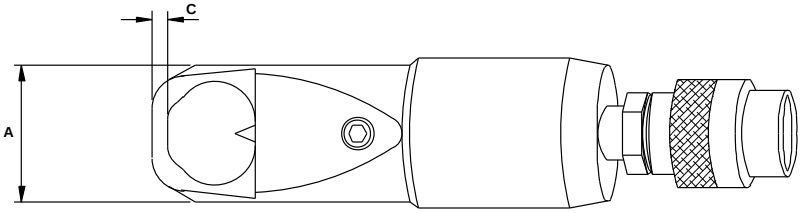
⚠ CAUTION

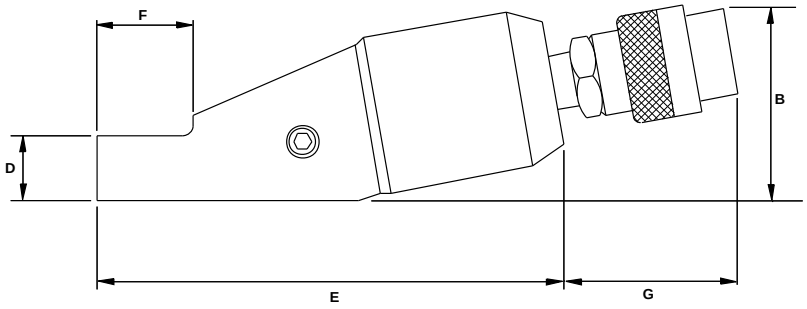
Enerpac nut splitters are designed specifically for metal nuts which match sizes shown in the specifications chart. (Maximum allowable hardness of nuts to be split is HRc-44.) For materials and sizes not specified, contact Enerpac Technical Services.

DESCRIPTION

All Enerpac Nut Splitters are single-acting, hydraulic-advance, spring-return units. Hydraulic power can be supplied by hand, electric, or air-powered pumps capable of 10,000 psi output pressure.

Enerpac Nut Splitters consist of a two-piece threaded body, cutting blade, return spring, plunger, oil seal, and CR-400 coupler half. Spare setscrews, a spare blade and wrenches for removing and replacing the blade, are included with the nutsplitter. Each blade is made of high quality steel and can be re-sharpened using a grinding tool.





Specifications - Dimensions in Inches (mm)											
Model No.	**Bolt Range in. (mm)**	**Nut Range in. (mm)**	**Cap. (tons)**	**Weight lb (kg)**	**A**	**B**	**C**	**D**	**E**	**F**	**G**
NC-1319	5/16 - 1/2 (M6-M12)	1/2 - 3/4 (13-19)	5	2.6 (1.2)	1.57 (40)	1.89 (48)	.24 (6)	.75 (19)	4.69 (119)	1.10 (28)	3.90 (99)
NC-1924	1/2 - 5/8 (M12-M16)	3/4 - 15/16 (19-24)	10	4.4 (2.0)	2.17 (55)	2.80 (71)	.32 (8)	.98 (25)	6.02 (153)	1.50 (38)	2.36 (60)
NC-2432	5/8 - 7/8 (M16-M22)	15/16 - 1 1/8 (24-32)	15	6.6 (3.0)	2.60 (66)	2.99 (76)	.39 (10)	1.22 (31)	6.81 (173)	1.93 (49)	2.36 (60)
NC-3241	7/8 - 1 1/8 (M22-M27)	1 1/8 - 1 9/16 (32-41)	20	9.7 (4.4)	2.95 (75)	3.50 (89)	.59 (15)	1.38 (35)	8.39 (213)	2.60 (66)	2.36 (60)
NC-4150	1 1/8 - 1 3/8 (M27-M33)	1 9/16 - 2 (41-50)	35	18.1 (8.2)	3.78 (96)	4.29 (109)	.71 (18)	1.77 (45)	9.61 (244)	2.87 (73)	2.36 (60)
NC-5060	1 3/8 - 1 1/2 (M33-M39)	2 - 2 1/4 (50-60)	50	26.0 (11.8)	4.17 (106)	4.96 (126)	.71 (18)	2.13 (54)	11.73 (298)	3.46 (88)	2.36 (60)
NC-6075	1 1/2 - 1 7/8 (M39-M43)	2 3/8 - 2 7/8 (60-75)	56	75.1 (34.1)	6.14 (156)	7.13 (181)	.79 (20)	2.84 (72)	13.78 (350)	4.33 (111)	2.36 (60)

OPERATION

1. Connect the nut splitter coupler to the hose coupler.
2. Firmly tighten the couplers to prevent restricted oil flow.

NOTE: Pump vent/fill cap must be in the "VENT" position for proper pump functioning.

3. Close the pump release valve.

NOTE: To remove air trapped in the pump, hose, or cutter, freely advance and retract the cutter blade several times.

4. Place the nut splitter head over the nut.

NOTE: The flat surface of the cutter must rest flush against one of the nut flats, and the head must rest on a flat surface. See Figure 1 for correct and incorrect placements.

⚠ CAUTION

Improper placement of the nut splitter on the nut may cause the head to fail.

POSITIONING THE CUTTER HEAD

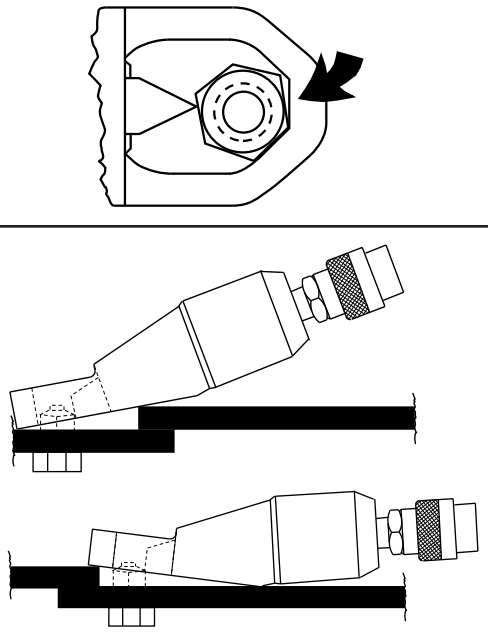
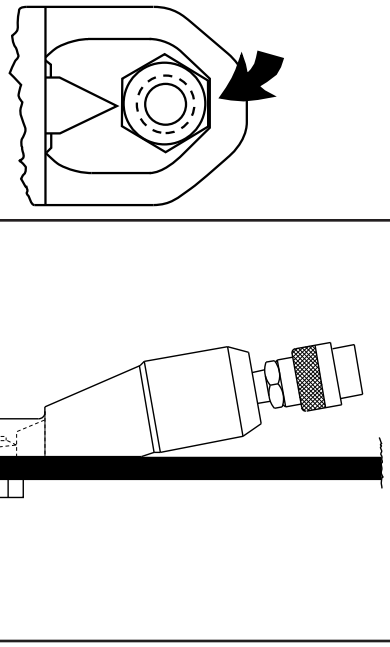
Incorrect	Correct
	

Figure 1.

⚠ WARNING

To prevent injury, keep fingers away from the cutter blade during splitting operations.

5. Hold the nut splitter in proper position.
6. Operate the pump until the cutter blade cuts through the nut.

NOTE: To avoid damage to the bolt thread, turn off the pump as soon as the nut is split. See Figure 2 for correct cutter blade stopping point.

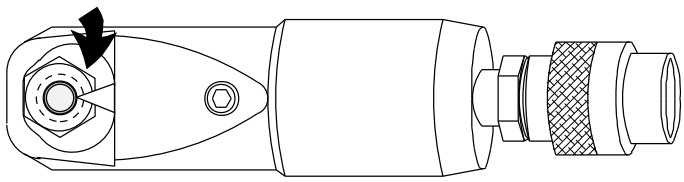


Figure 2.

7. Open the pump release valve to retract the cutter blade.
8. Lift the nut splitter off the split nut.
9. Repeat the cutting process on the other side of the nut (180° from the first cut).
10. Once the nut is completely split, retract the cutting blade.
11. Remove the nut splitter and split nut.

NOTE: Apply a suitable cutting fluid to stainless steel and hardened steel nuts before splitting to reduce cutter blade wear and breakage.

BLADE REMOVAL/REPLACEMENT

1. Open the pump release valve to remove hydraulic pressure from the nut splitter.
2. Disconnect the hose and nut splitter coupler halves.
3. Remove the setscrew from the side of the nut splitter body.
4. Remove the smaller setscrew from the same hole in the side of the nut splitter body.
5. Note the position of the blade angle for correct installation later.
6. Pull the blade out of the cutter body.
7. Inspect the blade edge for cracks, large nicks, and sharpness.
8. Replace the blade if it is damaged.

NOTE: The edge can be resharpened, but avoid removing more than $^{1}/_{16}$" of material and maintain the original cutting angle.

9. Apply a coat of grease to the blade shaft.
10. Insert the blade shaft-first into the cutter body.
11. Align the blade to the position noted in step 5.
12. Insert the small setscrew and tighten.
13. Insert the larger setscrew and tighten firmly.
14. Connect the cutter and hose couplers.
15. Check cutter operation by advancing and retracting the blade several times.

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