# RIVET NUT ADAPTER KIT

# RN9

## ⚠ WARNING ⚠

Study, understand and follow all instructions provided with this product. Read these instructions carefully before installing, operating, servicing or repairing this tool. Keep these instructions in a safe, accessible place.

## INTENDED USE OF THE TOOL

**WEAR WORK GLOVES (RUBBER COATED PREFERRED) FOR GRIPPING THE ADAPTER, ESPECIALLY FOR LARGEST SIZES.** This tool is designed to be used with a cordless drill that uses a clutch to limit torque to different settings. Use tool to set aluminum, steel and stainless rivet nuts up to 3/8" (10mm) in sheet metal. Do not use this tool outside of the designed intent. Never modify the tool for any other purpose or use.

## ⚠ WARNING ⚠

**Caution: To help prevent personal injury**

- **Use of this product can expose you to chemicals including ethylene glycol, gasoline vapors and engine exhaust, which are known to the State of California to cause cancer, birth defects, or reproductive harm. For more information, visit www.P65Warnings.ca.gov. Always wear ANSI approved safety equipment, safety glasses and clothing when using this product. Study, understand, and follow all instructions provided with this product. Failure to read and follow all warnings and operating instructions may result in damages and serious injury or death.**
- **Always wear ANSI approved goggles when using this product (users and bystanders).**
- **Never use this tool for any application other than for which it was designed.**
- **Only use accessories designed for this tool.**
- **Never alter or modify this tool in any way.**
- **Improper operation and/or maintenance of the tool, modification of the tool, or use of the tool with accessories not designed for it could result in serious injury or death.**
- **Always select the correct accessories of the correct size and design for the job that you are attempting to perform.**
- **Always work in a clean, safe, well-lit, organized and adequately equipped area.**
- **Do not begin repairs without assurance that vehicle is in secure position, and will not move during repair.**

Made in China
to Matco specifications

## 1 YEAR LIMITED WARRANTY

The manufacturer warrants this product to the original user against defective material or workmanship for a period of 1 year from the date of purchase.

The manufacturer reserves the right to determine whether the part or parts failed because of defective material, workmanship or other causes. Failures caused by accident, alteration, or misuse are not covered by this warranty.

The manufacturer, at its discretion, will repair or replace products covered under this warranty free of charge. Repairs or replacements of products covered under this warranty are warrantied for the remainder of the original warranty period.

The manufacturer or its authorized service representatives must perform all warranty repairs. Any repair to the product by unauthorized service representatives voids this warranty. The rights under this warranty are limited to the original user and may not be transferred to subsequent owners.

This warranty is in lieu of all other warranties, expressed or implied, including warranties of merchantability and fitness for a particular purpose. Some states do not allow the exclusion or limitations of incidental or consequential damages, so the above limitations may not apply to you.

## BEFORE USE

When unpacking, check the parts diagram and part number listing on page 4 to make sure all parts are included. If any parts are missing or damaged, please call your distributor.

## PRODUCT INFORMATION:

- **Adaptability.** Easily convert cordless, pneumatic or corded drills into a power rivet nut setter for sizes 10-24, 1/4-20, 5/16-18, 3/8-16, M5, M6, M8 and M10.
- **Versatility.** Use 12V and up cordless drills for aluminum and steel rivet nuts, or 18V+ for larger sizes like M10 and 3/8" and/or stainless (driver must feature torque limiting clutch).
- **Durability.** Constructed with shielded bearings, CRO-MO mandrels and machined billet aluminum body.

**DO NOT DISCARD – GIVE TO USER**

MATCO TOOLS

# RIVET NUT ADAPTER KIT

**RN9**

## I. PRODUCT TECHNICAL DATA:

Dimensions: 8.5" x 5.5" x 2.4"
Weight: 2.5 lbs.
Hex Shank Size: 6.35mm (1/4")
Riveting Capability:

| Rivet Nut Size | | SAE 10-24 | SAE 1/4-20 | SAE 5/16-18 | SAE 3/8-16 | M5 | M6 | M8 | M10 |
|---|---|---|---|---|---|---|---|---|---|
| Nut Material | Aluminum | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Steel/Copper | ✓ | ✓ | ✓ | ✓* | ✓ | ✓ | ✓ | ✓* |
| | Stainless Steel | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

*Tool is capable but may require very high grip strength

Rivet Type: Rivet Nut
Stroke Limit: Maximum 0.7"
Working Torque: Refer to section III. Operation Guide
Recommended RPM: Low speed, driver setting (<240 RPM)

Requirements of Driving Tools:
- Adjustable torque setting
- Chuck capacity of 6.35mm (1/4") shank
- Minimum 12V for aluminum, or M5 and 10-24 steel rivet nuts
- Minimum 14.4V for steel rivet nuts in M6, M8, 1/4" and 5/16" or stainless in M5 or 10-24
- Minimum full-size 18V+ for M10 and 3/8" rivet nuts and all other sizes in stainless steel (**WEAR GLOVES)**
- Clutch provides a felt and/or audible indication of reaching max setting

Requirements of electric or pneumatic Driving Tool:
- Adjustable torque setting
- Chuck capacity of 6.35mm (1/4") shank
- With maximum torque > 190 in. lbs. for aluminum and steel rivet nuts in smaller sizes
- With maximum torque > 400 in. lbs. for stainless steel rivet nuts

Common Sizes Chart:

| Rivet Nut | Rivet Nut Diameter | Drill Hole Size | Grip Range |
|---|---|---|---|
| M5 | 6.9mm OD | 7mm (9/32") | 26 – 16ga |
| M6 | 8.9mm OD | 9mm (3/8") | 26 – 13ga |
| M8 | 10.9mm OD | 11mm (7/16") | 26 – 11ga |
| M10 | 12.9mm OD | 13mm (17/32") | 26 – 11ga |
| 10-24 | 6.9mm OD | 7mm (9/32") | 26 – 16ga |
| 1/4-20 | 8.9mm OD | 9mm (3/8") | 26 – 13ga |
| 5/16-18 | 10.9mm OD | 11mm (7/16") | 26 – 11ga |
| 3/18-16 | 12.9mm OD | 13mm (17/36") | 26 – 11ga |

## II. SAFETY GUIDE:

1. Wear adequate protective gear including ANSI approved goggles and **THICK WORK GLOVES (RUBBER COATED)**
2. Only use the nut riveting adapter with driving tool that matches with requirements specified on **Product Technical Data.**
3. Switch off the driving tool before installing or uninstalling the nut riveting adapter.
4. The objects to be riveted **MUST BE SECURED BEFORE** riveting in order to avoid possible injury. Unsecured objects may rotate with the driving tool if not secured.
5. The driving tool MUST be stopped if user releases the adapters body during riveting.
6. During disassembly for mandrel changing or **Maintenance**, take care as there are pre-loaded springs within the tool.



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## III. OPERATION GUIDE:

**WARNING: WEAR WORK GLOVES (RUBBER COATED PREFERRED) FOR GRIPPING THE ADAPTER**

**IMPORTANT**: Ensure the threads on mandrels are clean and the loaded rivet nut has full thread engagement with threaded mandrel during riveting. It is strongly recommended to clean and lubricate (ex. silicone spray, dry lube) the threads on mandrels before and after use.

**CRITICAL**: Before using the tool on your intended work piece, it is REQUIRED that you test the tool with a rivet nut on a test piece to determine the adequate torque needed for your rivet nut size, rivet nut material, and sheet metal thickness and material.

- Ensure drill is in "driver" mode and not drill mode. Different drills will require different torque, limiting settings for the same material.
- On the test piece, set your drill to a low clutch setting and work up to higher settings until the torque level is enough to fully set the rivet nut but not over set. WARNING: Over setting rivet nuts may permanently damage the mandrel or tool.
- Once the torque level is determined, test again on a new hole at your intended setting to confirm. The knurled part of the rivet nut should look mushroomed, starting to become flat on the other side of the work piece and should not rotate when you install a bolt.

**1. Tool Installation:**

Install a new mandrel and nosepiece to match your intended rivet nut thread size. Use the included wrench to install the new mandrel into the #2 Plunger Tube. Ensure that the mandrel and other components are tightly fixed in position. After installing the front bushing cover and lock bushing, lightly tighten the new nosepiece onto the end of the tool. Install the hex shank drive end of the tool into your drill and affix tightly into its chuck.

**2. Riveting:**

2.1 While holding the adapter with your hand (**WEAR GLOVES**), operate the drill in the REV direction until you hear the adapter start to click. This means it has fully exposed the mandrel.

2.2 Switch the drill to the FWD setting.

2.3 Manually thread the selected rivet nut onto threaded mandrel or hold the rivet nut in one hand and use another hand to pull the drill trigger slightly to have the nut threaded on by the tool.

2.4 Ensure the rivet nut has adequate engaged thread and that there is no cross threading. Check and confirm the objects to be riveted are SECURE.

2.5 Some small amount of clearance between nose piece and the flange of rivet nut may be beneficial to operation, but keep adequate thread engagement on the nut.

2.6 Refer to Section III. for determining the proper drill torque settings (REQUIRED).

2.7 Put the fully threaded rivet nut onto the tools mandrel into the proper size hole (see Sizing Chart on page 2).

2.8 Align the adapter with the hole angle as best you can. While gripping the adapter firmly with one hand (wear work gloves), operate the drill in the FWD direction until you feel or hear the drills torque clutch catching. The adapter should not rotate while the drill is working. Release your grip on the adapter and reverse the drill out of the rivet nut. Depending on the material, you may need to manually help the adapter thread out of the rivet nut with your off hand.

***Tip 1: If setting M10 or 3/8" and especially on stainless, high grip strength is required. Not all rivet nuts are the same--some require more force.***

***Tip 2: Make a note of the torque setting of your application for future use.***

## IV. MAINTENANCE:

1. The nut riveting adapter is lubricated before shipping. Recommended: cleaning the components of plunger tube, and using lubricant grease to re-lubricate its parts on at least a yearly basis.

2. Threaded mandrel replacement:
life span of threaded mandrel varies with usage frequency and the uses of different rivet nut sizes/types. Recommended: replacing the threaded mandrel with new spare and its nosepiece before it is worn-out.

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## ⚠ ADVERTENCIA ⚠

Estudie, entienda y siga todas las instrucciones que se proveen con este producto. Lea las instrucciones detenidamente antes de instalar, operar, dar servicio o reparar esta herramienta. Guarde estas instrucciones en un lugar seguro y accesible.

## INTENDED USE OF THE TOOL

**WEAR WORK GLOVES (RUBBER COATED PREFERRED) FOR GRIPPING THE ADAPTER, ESPECIALLY FOR LARGEST SIZES.** This tool is designed to be used with a cordless drill that uses a clutch to limit torque to different settings. Use tool to set aluminum, steel and stainless rivet nuts up to 3/8" (10mm) in sheet metal. Do not use this tool outside of the designed intent. Never modify the tool for any other purpose or use.

## ⚠ ADVERTENCIA ⚠

- **El uso de este producto puede exponerlo a productos químicos que incluyen etilenglicol, vapores de gasolina y gases de escape del motor, que en el estado de California son causantes de cáncer, defectos de nacimiento o daños reproductivos. Para obtener más información, visite www.P65Warnings.ca.gov . Siempre use equipo de seguridad aprobado por ANSI, gafas de seguridad y ropa cuando use este producto. Estudie, comprenda y siga todas las instrucciones proporcionadas con este producto. Si no lee y sigue todas las advertencias e instrucciones de funcionamiento puede ocasionar daños y lesiones graves o la muerte.**
- **Siempre use guantes del tipo aprobado por la ANSI para trabajar con esta herramienta. (tanto usuarios como espectadores).**
- **Nunca utilice esta herramienta para cualquier otra cosa que no sean las aplicaciones para lo que fue diseñada.**
- **Sólo utilice los accesorios diseñados para esta herramienta.**
- **No modifique o altere esta herramienta de ninguna manera.**
- **El funcionamiento y/o mantenimiento inadecuado de la herramienta, la modificación, o la utilización de la herramienta con accesorios inadecuados podrían causar lesiones graves o la muerte.**
- **Siempre usar los correctos accesorios para el trabajo que Ud. está realizando.**
- **Trabaje siempre en un área limpia, segura, bien iluminada, organizada y equipada adecuadamente.**

HECHO en China
para Matco especificaciones

## GARANTÍA LIMITADA DE UN AÑO

El fabricante garantiza este producto al usuario original contra defectos de materiales o de mano de obra durante un periodo de un año a partir de la fecha de compra.
El fabricante se reserva el derecho a determinar si una pieza o piezas fallaron debido a material defectuoso, mano de obra, o por otras causas. Esta garantía no cubre fallas causadas por accidentes, alteraciones o uso indebido.
El fabricante, a su entera discreción, reparará o reemplazará los productos cubiertos por esta garantía sin costo alguno. Las reparaciones o reemplazos de productos cubiertos por esta garantía quedan garantizados durante el resto del periodo original de garantía.
El fabricante o sus representantes autorizados de servicio deben llevar a cabo todas las reparaciones de garantía. Toda reparación hecha al producto por representantes de servicio no autorizados invalida la presente garantía. Los derechos que ampara esta garantía están limitados al usuario original y no se pueden transferir a dueños posteriores.
Esta garantía reemplaza a todas las demás garantías expresas o implícitas, incluyendo garantías de comercialización e idoneidad para un propósito particular. Algunos estados no permiten la exclusión o limitaciones de daños incidentales o imprevistos, de manera que las limitaciones mencionadas anteriormente pueden no ser aplicables en su caso.

## DESEMPACADO

Cuando desempaque el producto, revise el diagrama y la lista de piezas en página 4 para verificar que se hayan enviado todas las piezas. De perder piezas o tener piezas dañadas, favor llamar a su distribuidor inmediatamente.

## INFORMACIÓN DEL PRODUCTO:

- **Adaptability.** Easily convert cordless, pneumatic or corded drills into a power rivet nut setter for sizes 10-24, 1/4-20, 5/16-18, 3/8-16, M5, M6, M8 and M10.
- **Versatility.** Use 12V and up cordless drills for aluminum and steel rivet nuts, or 18V+ for larger sizes like M10 and 3/8" and/or stainless (driver must feature torque limiting clutch).
- **Durability.** Constructed with shielded bearings, CRO-MO mandrels and machined billet aluminum body.

**NO LO DESCARTE O DESECHE, ENTREGESELO AL USUARIO**



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## I. PRODUCT TECHNICAL DATA:

Dimensions: 8.5" x 5.5" x 2.4"
Weight: 2.5 lbs.
Hex Shank Size: 6.35mm (1/4")
Riveting Capability:

| Rivet Nut Size | | SAE 10-24 | SAE 1/4-20 | SAE 5/16-18 | SAE 3/8-16 | M5 | M6 | M8 | M10 |
|---|---|---|---|---|---|---|---|---|---|
| Nut Material | Aluminum | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Steel/Copper | ✓ | ✓ | ✓ | ✓* | ✓ | ✓ | ✓ | ✓* |
| | Stainless Steel | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

*Tool is capable but may require very high grip strength

Rivet Type: Rivet Nut
Stroke Limit: Maximum 0.7"
Working Torque: Refer to section III. Operation Guide
Recommended RPM: Low speed, driver setting (<240 RPM)
Requirements of Driving Tools:

- Adjustable torque setting
- Chuck capacity of 6.35mm (1/4") shank
- Minimum 12V for aluminum, or M5 and 10-24 steel rivet nuts
- Minimum 14.4V for steel rivet nuts in M6, M8, 1/4" and 5/16" or stainless in M5 or 10-24
- Minimum full-size 18V+ for M10 and 3/8" rivet nuts and all other sizes in stainless steel **(WEAR GLOVES)**
- Clutch provides a felt and/or audible indication of reaching max setting

Requirements of electric or pneumatic Driving Tool:

- Adjustable torque setting
- Chuck capacity of 6.35mm (1/4") shank
- With maximum torque > 190 in. lbs. for aluminum and steel rivet nuts in smaller sizes
- With maximum torque > 400 in. lbs. for stainless steel rivet nuts

Common Sizes Chart:

| Rivet Nut | Rivet Nut Diameter | Drill Hole Size | Grip Range |
|---|---|---|---|
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| M6 | 8.9mm OD | 9mm (3/8") | 26 – 13ga |
| M8 | 10.9mm OD | 11mm (7/16") | 26 – 11ga |
| M10 | 12.9mm OD | 13mm (17/32") | 26 – 11ga |
| 10-24 | 6.9mm OD | 7mm (9/32") | 26 – 16ga |
| 1/4-20 | 8.9mm OD | 9mm (3/8") | 26 – 13ga |
| 5/16-18 | 10.9mm OD | 11mm (7/16") | 26 – 11ga |
| 3/18-16 | 12.9mm OD | 13mm (17/36") | 26 – 11ga |

## II. SAFETY GUIDE:

1. Wear adequate protective gear including ANSI approved goggles and **THICK WORK GLOVES (RUBBER COATED)**
2. Only use the nut riveting adapter with driving tool that matches with requirements specified on **Product Technical Data.**
3. Switch off the driving tool before installing or uninstalling the nut riveting adapter.
4. The objects to be riveted **MUST BE SECURED BEFORE** riveting in order to avoid possible injury. Unsecured objects may rotate with the driving tool if not secured.
5. The driving tool MUST be stopped if user releases the adapters body during riveting.
6. During disassembly for mandrel changing or **Maintenance**, take care as there are pre-loaded springs within the tool.



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# RIVET NUT ADAPTER KIT

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## III. OPERATION GUIDE:

**WARNING: WEAR WORK GLOVES (RUBBER COATED PREFERRED) FOR GRIPPING THE ADAPTER**

**IMPORTANT**: Ensure the threads on mandrels are clean and the loaded rivet nut has full thread engagement with threaded mandrel during riveting. It is strongly recommended to clean and lubricate (ex. silicone spray, dry lube) the threads on mandrels before and after use.

**CRITICAL**: Before using the tool on your intended work piece, it is REQUIRED that you test the tool with a rivet nut on a test piece to determine the adequate torque needed for your rivet nut size, rivet nut material, and sheet metal thickness and material.

- Ensure drill is in "driver" mode and not drill mode. Different drills will require different torque, limiting settings for the same material.
- On the test piece, set your drill to a low clutch setting and work up to higher settings until the torque level is enough to fully set the rivet nut but not over set. WARNING: Over setting rivet nuts may permanently damage the mandrel or tool.
- Once the torque level is determined, test again on a new hole at your intended setting to confirm. The knurled part of the rivet nut should look mushroomed, starting to become flat on the other side of the work piece and should not rotate when you install a bolt.

**1. Tool Installation:**

Install a new mandrel and nosepiece to match your intended rivet nut thread size. Use the included wrench to install the new mandrel into the #2 Plunger Tube. Ensure that the mandrel and other components are tightly fixed in position. After installing the front bushing cover and lock bushing, lightly tighten the new nosepiece onto the end of the tool. Install the hex shank drive end of the tool into your drill and affix tightly into its chuck.

**2. Riveting:**

2.1 While holding the adapter with your hand (**WEAR GLOVES**), operate the drill in the REV direction until you hear the adapter start to click. This means it has fully exposed the mandrel.

2.2 Switch the drill to the FWD setting.

2.3 Manually thread the selected rivet nut onto threaded mandrel or hold the rivet nut in one hand and use another hand to pull the drill trigger slightly to have the nut threaded on by the tool.

2.4 Ensure the rivet nut has adequate engaged thread and that there is no cross threading. Check and confirm the objects to be riveted are SECURE.

2.5 Some small amount of clearance between nose piece and the flange of rivet nut may be beneficial to operation, but keep adequate thread engagement on the nut.

2.6 Refer to Section III. for determining the proper drill torque settings (REQUIRED).

2.7 Put the fully threaded rivet nut onto the tools mandrel into the proper size hole (see Sizing Chart on page 2).

2.8 Align the adapter with the hole angle as best you can. While gripping the adapter firmly with one hand (wear work gloves), operate the drill in the FWD direction until you feel or hear the drills torque clutch catching. The adapter should not rotate while the drill is working. Release your grip on the adapter and reverse the drill out of the rivet nut. Depending on the material, you may need to manually help the adapter thread out of the rivet nut with your off hand.

***Tip 1: If setting M10 or 3/8" and especially on stainless, high grip strength is required. Not all rivet nuts are the same--some require more force.***

***Tip 2: Make a note of the torque setting of your application for future use.***

## IV. MAINTENANCE:

1. The nut riveting adapter is lubricated before shipping. Recommended: cleaning the components of plunger tube, and using lubricant grease to re-lubricate its parts on at least a yearly basis.

2. Threaded mandrel replacement:
life span of threaded mandrel varies with usage frequency and the uses of different rivet nut sizes/types. Recommended: replacing the threaded mandrel with new spare and its nosepiece before it is worn-out.



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## ⚠ AVERTISSEMENT ⚠

Etudier, comprendre et suivre toutes les instructions fournies avec ce produit. Lire ces instructions attentivement avant d'installer, d'utiliser, d'entretenir et de réparer cet outil. Conserver ces instructions dans un endroit sécuritaire et accessible.

## INTENDED USE OF THE TOOL

**WEAR WORK GLOVES (RUBBER COATED PREFERRED) FOR GRIPPING THE ADAPTER, ESPECIALLY FOR LARGEST SIZES.** This tool is designed to be used with a cordless drill that uses a clutch to limit torque to different settings. Use tool to set aluminum, steel and stainless rivet nuts up to 3/8" (10mm) in sheet metal. Do not use this tool outside of the designed intent. Never modify the tool for any other purpose or use.

## ⚠ Mesure de sécurité ⚠

**Mise en garde : Pour aider à prévenir les blessures**

- **L'utilisation de ce produit peut vous exposer à des produits chimiques, notamment l'éthylène glycol, les vapeurs d'essence et les gaz d'échappement des moteurs, qui sont reconnus par l'État de Californie pour causer le cancer, des anomalies congénitales ou des problèmes de reproduction. Pour plus d'informations, visitez www.P65Warnings.ca.gov. Toujours porter un équipement de sécurité, des lunettes de sécurité et des vêtements homologués ANSI lors de l'utilisation de ce produit. Étudier, comprendre et suivre toutes les instructions fournies avec ce produit. Ne pas lire et suivre tous les avertissements et instructions d'utilisation peut entraîner des dommages et des blessures graves ou la mort.**
- **Toujours porter des lunettes à coques approuvées par l'ANSI lorsque vous utilisez ce produit.**
- **Toujours utiliser les accessoires adéquats pour le travail que vous effectuez.**
- **Toujours travailler dans un environnement propre, sécuritaire, bien éclairé, organisé et suffisamment équipé.**

Fabriqué à Chine
les spécifications de Matco

## GARANTIE À VIE

Le manufacturier garantit à l'acheteur initial que ce produit est exempt de tout vice de matériau et de fabrication pendant une période de une année suivant la date de l'achat.

Le fabricant se réserve le droit de déterminer si la pièce ou les pièces ont échoué en raison d'un défaut de matériau, de fabrication ou d'autres causes.

Les défauts causés par un accident, une altération ou un mauvais usage ne sont pas couverts par cette garantie.

Les remplacements sous garantie comportent également une garantie à vie. Les droits sous cette garantie sont limités à l'utilisateur original et ne peuvent être transférés aux propriétaires suivants.

La garantie remplace toutes les autres garanties, explicites ou implicites, y compris les garanties de qualité marchande et d'adéquation à un usage particulier. Certains états ne permettent pas l'exclusion ou les limitations De dommages accessoires ou consécutifs, de sorte que les limitations ci-dessus peuvent ne pas s'appliquer à vous.

## DÉBALLAGE

Lors du déballage, vérifier que les pièces contenues dans le schéma et la liste des numéros de pièces de la page 4 sont toutes incluses. Si une pièce est manquante ou abîmée, veuillez appeler immédiatement votre distributeur.

## INFORMATIONS PRODUIT:

- **Adaptability.** Easily convert cordless, pneumatic or corded drills into a power rivet nut setter for sizes 10-24, 1/4-20, 5/16-18, 3/8-16, M5, M6, M8 and M10.
- **Versatility.** Use 12V and up cordless drills for aluminum and steel rivet nuts, or 18V+ for larger sizes like M10 and 3/8" and/or stainless (driver must feature torque limiting clutch).
- **Durability.** Constructed with shielded bearings, CRO-MO mandrels and machined billet aluminum body.

**NE PAS JETER-DONNER À L'UTILISATEUR**



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# RIVET NUT ADAPTER KIT

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| Rivet Nut Size | | SAE 10-24 | SAE 1/4-20 | SAE 5/16-18 | SAE 3/8-16 | M5 | M6 | M8 | M10 |
|---|---|---|---|---|---|---|---|---|---|
| Nut Material | Aluminum | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Steel/Copper | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Stainless Steel | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

*Tool is capable but may require very high grip strength

Rivet Type: Rivet Nut
Stroke Limit: Maximum 0.7"
Working Torque: Refer to section III. Operation Guide
Recommended RPM: Low speed, driver setting (<240 RPM)
Requirements of Driving Tools:

- Adjustable torque setting
- Chuck capacity of 6.35mm (1/4") shank
- Minimum 12V for aluminum, or M5 and 10-24 steel rivet nuts
- Minimum 14.4V for steel rivet nuts in M6, M8, 1/4" and 5/16" or stainless in M5 or 10-24
- Minimum full-size 18V+ for M10 and 3/8" rivet nuts and all other sizes in stainless steel **(WEAR GLOVES)**
- Clutch provides a felt and/or audible indication of reaching max setting

Requirements of electric or pneumatic Driving Tool:

- Adjustable torque setting
- Chuck capacity of 6.35mm (1/4") shank
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Common Sizes Chart:

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## II. SAFETY GUIDE:

1. Wear adequate protective gear including ANSI approved goggles and **THICK WORK GLOVES (RUBBER COATED)**
2. Only use the nut riveting adapter with driving tool that matches with requirements specified on **Product Technical Data.**
3. Switch off the driving tool before installing or uninstalling the nut riveting adapter.
4. The objects to be riveted **MUST BE SECURED BEFORE** riveting in order to avoid possible injury. Unsecured objects may rotate with the driving tool if not secured.
5. The driving tool MUST be stopped if user releases the adapters body during riveting.
6. During disassembly for mandrel changing or **Maintenance**, take care as there are pre-loaded springs within the tool.

## III. OPERATION GUIDE:

**WARNING: WEAR WORK GLOVES (RUBBER COATED PREFERRED) FOR GRIPPING THE ADAPTER**

**IMPORTANT**: Ensure the threads on mandrels are clean and the loaded rivet nut has full thread engagement with threaded mandrel during riveting. It is strongly recommended to clean and lubricate (ex. silicone spray, dry lube) the threads on mandrels before and after use.

**CRITICAL**: Before using the tool on your intended work piece, it is REQUIRED that you test the tool with a rivet nut on a test piece to determine the adequate torque needed for your rivet nut size, rivet nut material, and sheet metal thickness and material.

- Ensure drill is in "driver" mode and not drill mode. Different drills will require different torque, limiting settings for the same material.
- On the test piece, set your drill to a low clutch setting and work up to higher settings until the torque level is enough to fully set the rivet nut but not over set. WARNING: Over setting rivet nuts may permanently damage the mandrel or tool.
- Once the torque level is determined, test again on a new hole at your intended setting to confirm. The knurled part of the rivet nut should look mushroomed, starting to become flat on the other side of the work piece and should not rotate when you install a bolt.

**1. Tool Installation:**

Install a new mandrel and nosepiece to match your intended rivet nut thread size. Use the included wrench to install the new mandrel into the #2 Plunger Tube. Ensure that the mandrel and other components are tightly fixed in position. After installing the front bushing cover and lock bushing, lightly tighten the new nosepiece onto the end of the tool. Install the hex shank drive end of the tool into your drill and affix tightly into its chuck.

**2. Riveting:**

2.1 While holding the adapter with your hand (**WEAR GLOVES**), operate the drill in the REV direction until you hear the adapter start to click. This means it has fully exposed the mandrel.

2.2 Switch the drill to the FWD setting.

2.3 Manually thread the selected rivet nut onto threaded mandrel or hold the rivet nut in one hand and use another hand to pull the drill trigger slightly to have the nut threaded on by the tool.

2.4 Ensure the rivet nut has adequate engaged thread and that there is no cross threading. Check and confirm the objects to be riveted are SECURE.

2.5 Some small amount of clearance between nose piece and the flange of rivet nut may be beneficial to operation, but keep adequate thread engagement on the nut.

2.6 Refer to Section III. for determining the proper drill torque settings (REQUIRED).

2.7 Put the fully threaded rivet nut onto the tools mandrel into the proper size hole (see Sizing Chart on page 2).

2.8 Align the adapter with the hole angle as best you can. While gripping the adapter firmly with one hand (wear work gloves), operate the drill in the FWD direction until you feel or hear the drills torque clutch catching. The adapter should not rotate while the drill is working. Release your grip on the adapter and reverse the drill out of the rivet nut. Depending on the material, you may need to manually help the adapter thread out of the rivet nut with your off hand.

***Tip 1: If setting M10 or 3/8" and especially on stainless, high grip strength is required. Not all rivet nuts are the same--some require more force.***

***Tip 2: Make a note of the torque setting of your application for future use.***

## IV. MAINTENANCE:

1. The nut riveting adapter is lubricated before shipping. Recommended: cleaning the components of plunger tube, and using lubricant grease to re-lubricate its parts on at least a yearly basis.

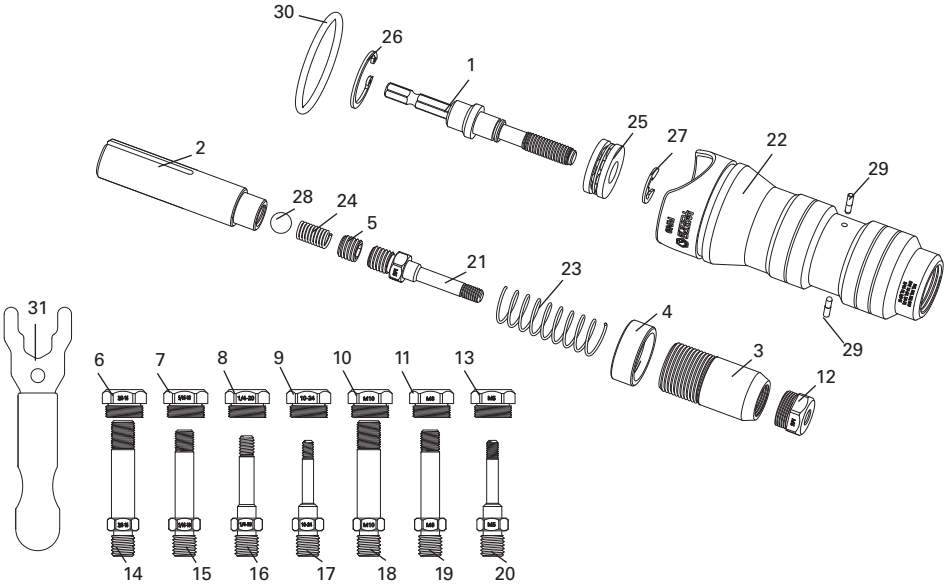
2. Threaded mandrel replacement:
life span of threaded mandrel varies with usage frequency and the uses of different rivet nut sizes/types. Recommended: replacing the threaded mandrel with new spare and its nosepiece before it is worn-out.

MATCO TOOLS

# RIVET NUT ADAPTER KIT

**RN9**

## PARTS BREAKDOWN




### Parts List

| Index | Part No. | Description | Qty |
|---|---|---|---|
| 1 | ADN14-01 | Hex Shank Driving Shaft | 1 |
| 2 | ADN14-02 | Plunger Tube | 1 |
| 3 | ADN14-03 | Front Bushing w/Knurling | 1 |
| 4 | ADN14-04 | Locking Bushing | 1 |
| 5 | ADN14-05 | Set Screw | 1 |
| 6 | ADN38-3/18-16N | SAE 3/18-16 Nosepiece | 1 |
| 7 | ADN38-5/16-18N | SAE 5/16-18 Nosepiece | 1 |
| 8 | ADN14-1/4-20N | SAE 1/4-20 Nosepiece | 1 |
| 9 | ADN14-10-24N | SAE 10-24 Nosepiece | 1 |
| 10 | ADN38-M10N | M10 Nosepiece | 1 |
| 11 | ADN38-M8N | M8 Nosepiece | 1 |
| 12 | ADN14-M6N | M6 Nosepiece | 1 |
| 13 | ADN14-M5N | M5 Nosepiece | 1 |
| 14 | ADN38-3/8-16M | SAE 3/8-16 Mandrel | 1 |
| 15 | ADN38-5/16-18M | SAE 5/16-18 Mandrel | 1 |
| 16 | ADN14-1/4-20M | SAE 1/4-20 Mandrel | 1 |

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| 17 | ADN14-10-24M | SAE 10-24 Mandrel | 1 |
| 18 | ADN38-M10M | M10 Mandrel | 1 |
| 19 | ADN38-M8M | M8 Mandrel | 1 |
| 20 | ADN14-M5M | M5 Mandrel | 1 |
| 21 | ADN14-M6M | M6 Mandrel | 1 |
| 22 | RN9-22 | Aluminum Handle | 1 |
| 23 | ADN14-23 | Front Spring | 1 |
| 24 | ADN14-24 | Inner Spring | 1 |
| 25 | RN9-25 | Thrust Ball Bearing | 1 |
| 26 | ADN14-26 | C-Clip | 1 |
| 27 | ADN14-27 | E-Clip | 1 |
| 28 | ADN14-28 | Steel Ball | 1 |
| 29 | ADN14-29 | Pins | 2 |
| 30 | RN9-30 | O-Ring | 1 |
| 31 | ADN14-31 | Wrench Kit | 1 |
| | | | |