TOOL USE INSTRUCTION

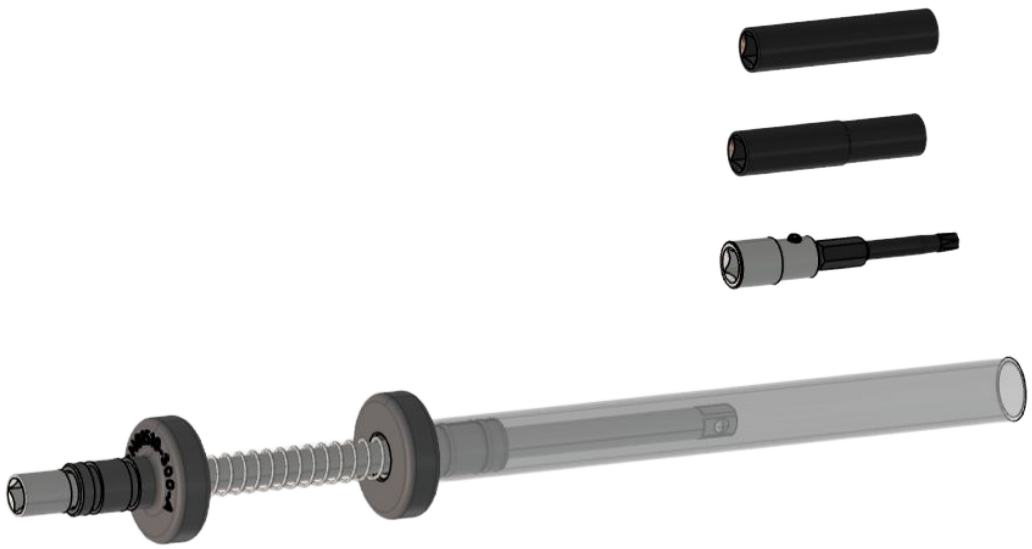
RIVIAN		
	TOOL NUMBER	**TSN01510-300-A**
	TITLE	**FASTENER REMOVAL TOOL, ASCENT DPIM**
	REV - DATE	**REV A - 12/20/2024**

CONTENTS

TOOL FUNCTION

Tool reduces the risk of dropping fasteners while removing oil spray bar and 3-phase bus bar fasteners during Ascent DPIM service.

Due to location of these fasteners within the drive unit motor cavity, a dropped fastener may require complete drive unit disassembly to retrieve.



SPECIFICATIONS

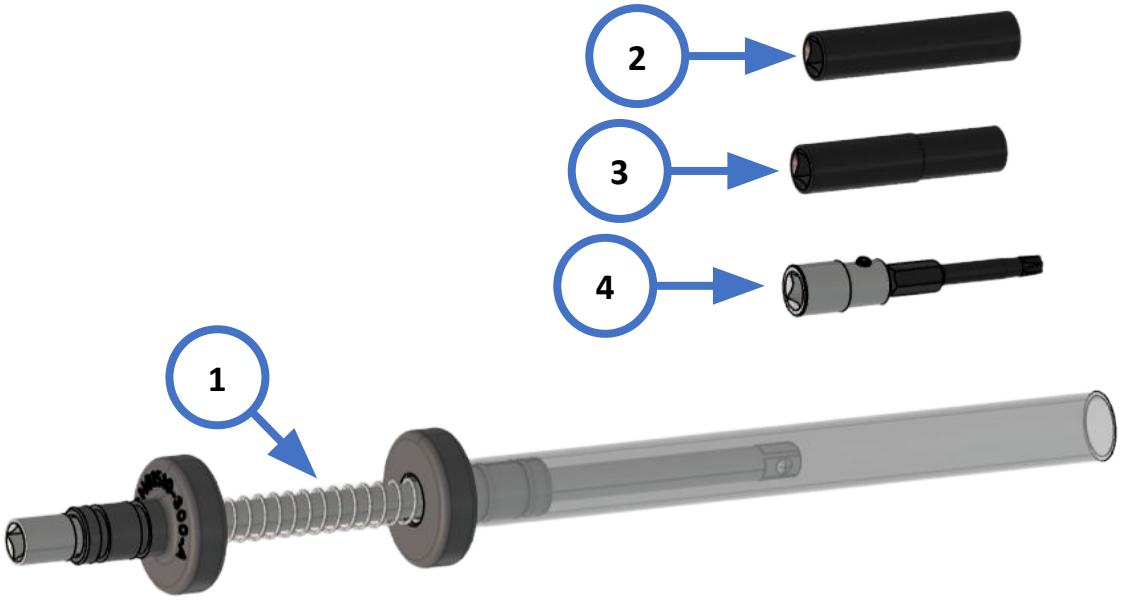
Weight: 0.18 kg (0.4 lb)
Overall Dimensions: Ø 32 x 280mm

LABOR CODES

428210010 - Inverter, Rear Drive Unit (Remove and Replace)
388210010 - Inverter, Front Drive Unit (Remove and Replace)

OTHER TOOLS REQUIRED

¼" DRIVE RATCHET (TSN00057-100-A or TSN00327-101-A)
¼" DRIVE TORQUE WRENCH (TSN00697-100-A or TSN00047-100-B or TSN00044-100-A)



COMPONENT GUIDE

ITEM	QTY	DESCRIPTION
1	1	FASTENER REMOVAL TOOL ASSEMBLY
2	1	8MM MAGNETIC SOCKET (¼" DRIVE, DEEP)
3	1	7MM MAGNETIC SOCKET (¼" DRIVE, DEEP)
4	1	T25 MAGNETIC BIT (+ ¼" DRIVE ADAPTER)

WARNING

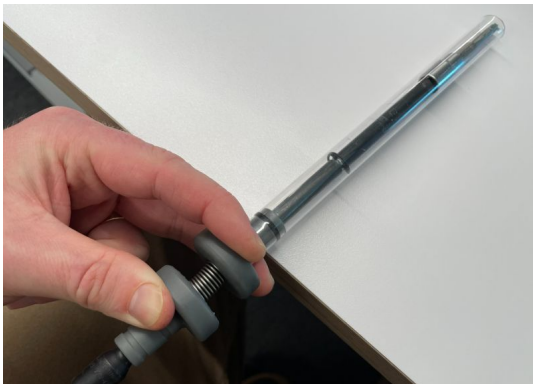
Do not perform procedure if tool is damaged or missing parts. Consult the Rivian Service Tool Catalog for replacement components.

Failure to follow guidelines outlined in this document could result in injury and/or property damage.

SAFETY GUIDELINES

1	Tool is intended for use with specific service operations only. Refer to Labor Codes and Rivian Service Manual.
2	Spring loaded tool can release unexpectedly. Wear eye protection during use.

1	**To install socket or bit:** Use one hand to fully compress the two knobs of the tool. Install socket or bit needed for the fastener being removed, ensuring retention feature in the socket is aligned to ball on the tool. **NOTE:** Clear tube may be removed as needed for bit install/removal.	
2	**To remove fastener:** Install tool to ¼" drive ratchet. Use one hand to fully compress 2x knobs of the tool until the socket or bit is exposed at the end of the clear tube.	
3	Guide tool into motor cavity and engage socket or bit with fastener head. Extend clear tube until head of the fastener is fully protected. **NOTE:** Keep one hand on the tool while loosening to prevent spring-back.	 
4	Once fastener is fully loosened, slowly retract tool until the fastener is drawn into the clear tube. Carefully remove tool + fastener from the motor cavity, keeping tool horizontal.	

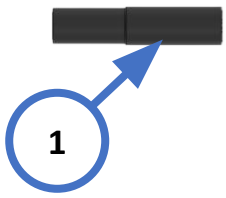
5	**To install fastener:** Install tool to ¼” drive torque wrench. Use one hand to fully compress 2x knobs of the tool until the socket or bit is exposed at the end of the clear tube.	
6	Load the new fastener to the socket or bit ensuring it’s securely held in place. Release knobs to draw fastener inside of the clear tube.	
7	Carefully guide tool + fastener inside of motor cavity until end of the clear tube is against the target surface. Slowly press tool inward to compress spring until fastener engages with threaded hole.	
8	Tighten fastener until snug and torque to specification. **NOTE:** Keep knobs compressed during torque sequence to avoid spring-back and slippage of the tool.	

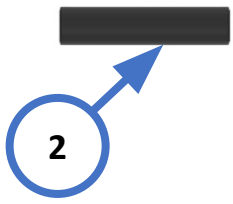
PROBLEM	SOLUTION
Clear tube is loose or doesn't stay attached to the tool.	O-rings are worn and need to be replaced. See SERVICE & REPLACEMENT COMPONENTS
Clear tube is difficult to remove from the tool.	Remove clear tube Apply light coating of lubricant (Super Lube 93003 or similar) to the o-rings
Sockets no longer stay engaged with the tool.	Sockets and/or extension are worn. Inspect ¼" drive features on tool and socket, replace worn components as needed.
Socket or bit has weak magnetic hold to the fastener.	Magnetic strength may have weakened over time OR Magnetic insert in socket may have been removed or damaged. Replace socket or bit as needed.

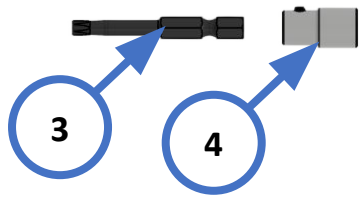
SERVICE & REPLACEMENT COMPONENTS

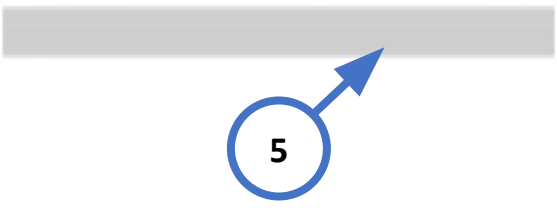
FOR OTHER ITEMS NOT SHOWN, CONTACT RIVIAN SERVICE TOOL ENGINEERING

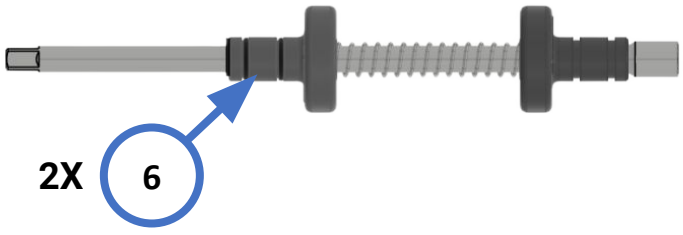
ITEM	DESCRIPTION	SUPPLIER	PART NUMBER
1	7MM MAGNETIC SOCKET (¼" DRIVE, DEEP)	Palmac	12300G-7 (Koken)
2	8MM MAGNETIC SOCKET (¼" DRIVE, DEEP)	Palmac	12300G-8 (Koken)
3	T25 MAGNETIC BIT	Palmac	121T.50-T25 (Koken)
4	¼" DRIVE BIT ADAPTER	Palmac	72014 (Wiha)
5	POLYCARBONATE TUBE, 16 OD X 14 ID	McMaster	8585K823 - cut to size
6	O-RING, SIZE 012	McMaster	9452K21











BASIC MAINTENANCE GUIDE

TASK	FREQUENCY
Inspect tool assembly, sockets, and bits for signs of wear or damage. Replace components as needed.	Before Each Use
Ensure clear tube is securely held to the tool. Replace o-rings if tube is loose	Before Each Use
Return tool and all sockets and bits to the case after every use	After Each Use
Store case in clean and dry place to prevent corrosion or contamination.	After Each Use

SYMBOL GLOSSARY

WARNING

Risk of minor injury

REVISION LOG

REV	DATE	CHANGE DESCRIPTION
A	12/20/2024	Initial release