



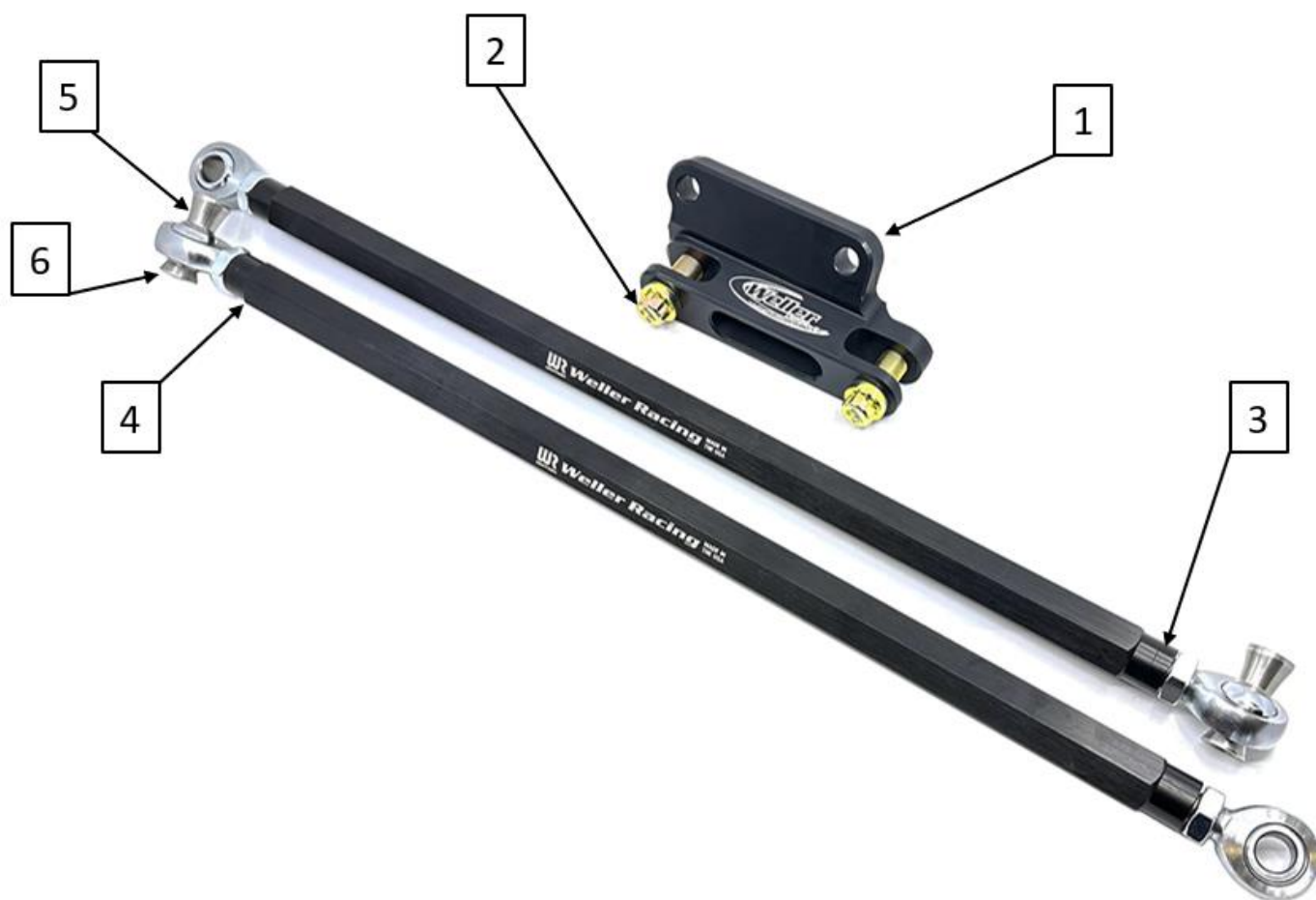
20130

WR MAVERICK X3 HD TIE ROD KIT, 72" MODELS

VEHICLE: CAN AM MAVERICK X3 72" MODELS

INSTRUCTIONS #: INS151

REVISION#: _REV00



Installation Instructions:

PARTS INCLUDED:

1. QTY 1 – BILLET TIE ROD STEERING FLAG
2. QTY 2 – INNER TIE ROD PIVOT BOLT (PRE-INSTALLED AND TORQUED)
3. QTY 1 – BILLET TIE ROD WITH HEIM JOINTS (DRIVER SIDE)
(NOTE GROVE ON END OF TIE RODS INDICATES LH THREADS) NOTE
POSITION OF GROVE AND WR LOGO)
4. QTY 1 - BILLET TIE ROD WITH HEIM JOINTS (PASSENGER SIDE)
5. QTY 2 - HEIM SPACER, LONG (UPPER)
6. QTY 2 - HEIM SPACER, SHORT (LOWER)

ESTIMATED INSTALL TIME: 1.5HRS

TOOLS LIST

- 19MM RATCHETING WRENCH
- 19MM SOCKETS, SHALLOW AND DEEP
- 18MM WRENCH AND SOCKET
- 17MM SOCKET
- 3/8" DRIVE RATCHET
- 1" WRENCH
- 15/16" WRENCH
(OR 2 LARGE ADJUSTABLE
WRENCHES)
- TORQUE WRENCH (FLEX HEAD
PREFERRED)
- NEEDLE NOSE PLIERS
- LARGE PRY BAR
- SHARP EDGE (CHISEL) PUNCH
- FLAT END PUNCH
- HAMMER
- MEDIUM STRENGTH THREAD LOCKER

1. REMOVE FRONT WHEELS

- LIFT FRONT OF VEHICLE AND SUPPORT WITH JACK STANDS

- REMOVE FRONT WHEELS

NOTE: KIT MAY BE ABLE TO BE INSTALLED WITHOUT REMOVING WHEELS IF OUTER TIE ROD/SPINDLE BOLT WILL COME OUT WITH WHEELS STILL ON (I.E. NUT ON TOP SIDE).



2. REMOVE OUTER TIE ROD/SPINDLE BOLTS (*BOTH SIDES*)

- REMOVE COTTER PIN - *RETAIN FOR REUSE*
- REMOVE NUT AND BOLT - *RETAIN FOR REUSE (REPLACE IF EXCESSIVELY WORN)*
- LET TIE ROD HANG DOWN

NOTE: WE PREFER TO INSTALL OUTER TIE ROD BOLTS WITH THE NUT ON THE TOP SIDE. THIS ALLOWS THE BOLT TO COME OUT WITHOUT REMOVING THE WHEELS FOR FASTER TRAIL REPAIRS.



3. LOOSEN INNER TIE ROD FLAG TO RACK BOLTS

- TURN STEERING WHEEL ALL THE WAY TO THE DRIVER SIDE
- FROM THE PASSENGER SIDE, USING SHARP EDGE PUNCH AND HAMMER, UNBEND THE LOCKING TAB SLIGHTLY
- USE FLAT PUNCH TO FLATTEN FULLY
- LOOSEN BUT DO NOT REMOVE FLAG BOLT
- TURN WHEEL FULLY TO PASSENGER SIDE AND REPEAT FOR SECOND BOLT



4. REMOVE STEERING FLAG AND TIE RODS

- TURN WHEEL TO DRIVER SIDE UNTIL PASSENGER SIDE FLAG BOLT LINES UP WITH CHASSIS BOLT AS SHOWN. (THIS WILL CENTER THE RACK FOR RE-ASSEMBLY)



- LOOSEN BOLTS FULLY FROM RACK, ROTATE FLAG AND BOLT HEADS DOWNWARD
- FEED FLAG AND TIE RODS THROUGH CHASSIS TO REMOVE
- SAVE BOLTS AND LOCKING PLATE FOR REUSE



INSTALL

5. INSTALL BOLTS AND LOCK PLATE

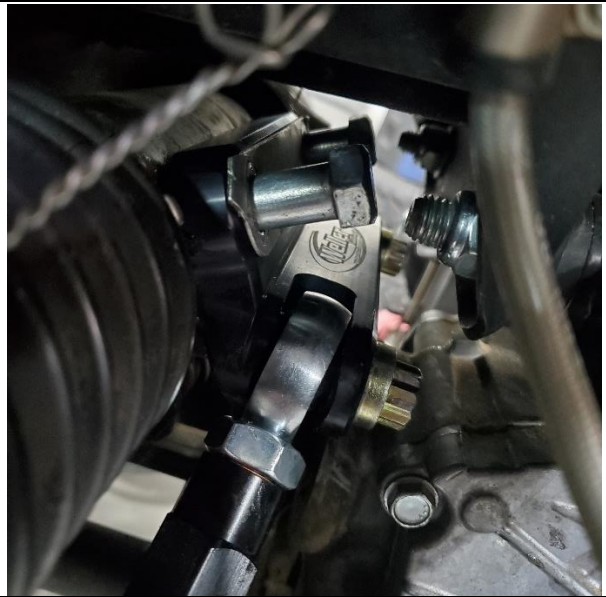
- PLACE REUSED BOLTS AND LOCKING PLATE ON NEW BILLET STEERING FLAG
- APPLY MEDIUM GRADE THREAD LOCKER TO BOLT THREADS



6. INSTALL NEW BILLET STEERING FLAG ASSEMBLY

BE PATIENT WITH THIS NEXT PART! A 2ND PAIR OF HANDS WILL BE HELPFUL

- WITH YOUR FINGER, FEEL THROUGH THE TWO HOLES IN THE RACK BODY AND LOCATE THE THREADED HOLES (THE OUTER TUBE "FLOATS" ON THE RACK BOOTS AND MAY NOT BE ALIGNED WITH THE THREADS). TURN THE STEERING WHEEL IF NEEDED TO ALIGN THE HOLE AND THREADS.
- FEED THE NEW FLAG ASSEMBLY INTO THE CHASSIS AND START THE BOLTS IN THE THREADS



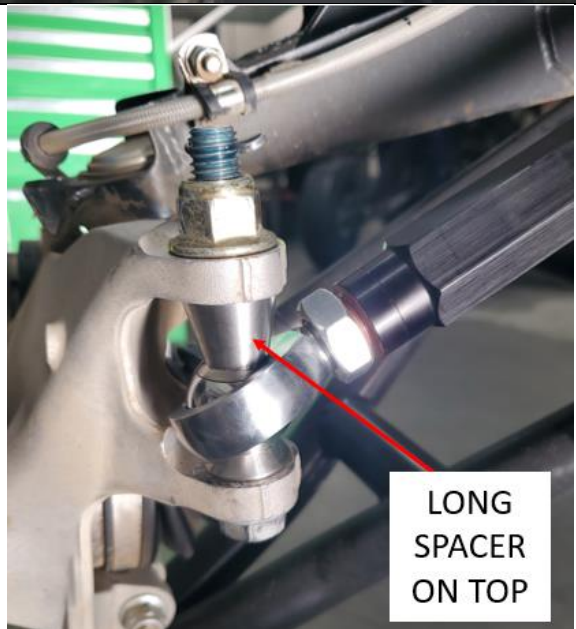
7. TIGHTEN FLAG BOLTS

- TIGHTEN FLAG BOLTS AND TORQUE TO **75FTLBS**. TIGHTEN MORE IF NEEDED TO ALIGN LOCKING TAB WITH FLAT PART ON BOLT, **BUT DO NOT EXCEED 100FTLBS**.
- WITH A LARGE PRY BAR, YOU CAN PRY UP ON THE LOCKING TAB TO RE-BEND THE TAB. TURN THE WHEEL LEFT OR RIGHT AS NEEDED FOR BEST ACCESS.
- USE A FLAT END PUNCH TO FINISH BENDING THE TAB TO LOCK THE BOLT IN PLACE



8. INSTALL OUTER ENDS OF TIE RODS (BOTH SIDES)

- REUSING HARDWARE FROM STEP 2, INSTALL OUTER TIE ROD ENDS TO SPINDLES (IT'S **IMPORTANT** THAT THE **LONGER SPACER GOES ON THE TOP SIDE**)
- USE **MEDIUM STRENGTH THREAD LOCKER** ON NUT, **TORQUE TO 77FTLBS**
- REINSTALL COTTER PIN (REPLACE IF EXCESSIVELY WORN)



9. ALIGN TOE (BOTH SIDES)

- THREAD JAM NUTS ALL THE WAY AGAINST HEIM JOINTS. THEN THREAD TIE ROD SHAFT UNTIL THREADS ARE FULLY SEATED
- USING WELLER LOGO AS REFERENCE, TURN TIE RODS **5 -1/4 FULL TURNS OUT** (THIS IS OUR RECOMMENDED STARTING POINT)
- INSTALL TIRES/WHEELS. **TORQUE TO 85FTLBS**
- SET TIRE PRESSURE TO DESIRED PSI



- LOWER VEHICLE, ROLL BACKWARD AND FORWARD TO SETTLE SUSPENSION
- CHECK TOE MEASUREMENTS AT FRONT AND REAR OF TIRES. WE PREFER TO USE WHEEL ALIGNMENT PLATES AS SHOWN IN PHOTO (FACTORY SERVICE PROCEDURE FOR ALIGNMENT CAN ALSO BE USED).
- OUR RECOMMENDED TOE SETTING IS **0 – 1/8" TOE OUT** (WIDER IN FRONT) (FACTORY REPAIR MANUAL STATES .300" +- .200" TOE OUT)
- ROTATE TIE RODS EVENLY TO ADJUST TOE



10. STRAIGHTEN STEERING WHEEL

- DRIVE VEHICLE BACK AND THEN STRAIGHT FORWARD ABOUT 25FT TO CHECK IF STEERING WHEEL IS NOT CENTERED WHEN DRIVING STRAIGHT, ADJUST TIE RODS EVENLY, ONE SIDE IN, ONE SIDE OUT, AS NEEDED TO CENTER STEERING WHEEL.
- **DO NOT EXCEED 9 FULL TURNS OUT ON TIE RODS.**

11. TIGHTEN 4 JAM NUTS

- TIGHTEN **ALL 4** JAM NUTS ON TIE ROD HEIMS TIGHT AGAINST BILLET TIE ROD.



12. DOUBLE CHECK TOE - DRIVE VEHICLE AND CHECK STEERING WHEEL ALIGNMENT TO CONFIRM ALL IS GOOD.

THIS COMPLETES THE INSTALL!

**BE SURE TO CHECK OUR WEBSITE,
WELLERRACING.COM FOR OTHER
COMPATIBLE PARTS AND ACCESSORIES FOR
YOUR RIDE!**