



Service Manual

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UNDERSTANDING THIS DOCUMENT

This document details approved processes of maintaining, diagnosing, disassembling, and reassembling suspensions produced by MTH Manufacturing. To perform proper maintenance on MTH axles all instructions contained in this manual should be followed as closely as possible.

NOTE: This service manual may be revised periodically to include engineering updates and new suspension models. The latest version of this manual is available on the MTH Manufacturing website. Always refer to the most current revision before performing service or maintenance procedures.

Safety Notices

Throughout this document there are various safety notices and procedures to ensure that the process is done as safe as possible. These notices are to help prevent potential injuries and/or product damage from occurring.

If the safety instructions and the Maintenance instructions are not followed this may lead to injury or damage to the suspension/vehicle and may affect or void the manufactures warranty.

The following safety warnings will be seen throughout this manual:

DANGER

Danger: Signifies a potentially dangerous situation that if not taken into consideration may lead to a serious injury or death

CAUTION

Caution: Signifies a potential situation which may lead to minor injury or product damage

Contact Information

If your suspension is currently under warranty through MTH Manufacturing before proceeding with any of the procedures outlined within the manual contact the engineering department.

Before contacting us prepare any of the applicable/available information about the suspension:

(See suspension identification section for instructions on how to find this information)

- Suspension Identification number
- AE number
- Production code

For customers looking for help identifying parts or service advice, contact us with the information listed above on hand.

Email: info@allyaxle.com
Telephone: [\(705\) 812-2982](tel:(705)812-2982)
Website: <https://allyaxle.com>

Address: 10 William St.,
Elmvale, L0L 1P0

Suspension Identification

Identifying the suspension in many ways. The first method of suspension identification is the shipping paperwork/tag that should be attached to the suspension upon arrival and included within the shipping paperwork itself.

Part #	 AX###	Skid # 1 15914
QUANTITY  10	PART # DESCRIPTION Part Name Here	
LOCATION  LOCATION	PO #  Chambers	
SHIP FROM MTH Manufacturing Inc. 10 William Street Elmvale, ON LOL 1PO (705) 812-2982		VENDOR CODE THRUW

On this tag the AE# is located under the top bar code as well as the part # to the left and the part name below. It is important to have this information ready when contacting us and even a picture of this sheet ready if possible.

Part Identification

Part identification for the underslung suspension assembly and undermount suspension assembly. If the Bill of Materials is not available, then it can be obtained by contacting MTH Manufacturing with the required information.

AE 62 3A 60 USR

AE- Brand name

62- series of 6200

3A- Axle configuration- Tridem Suspension

60- axle spacing

USR- underslung suspension

AE 61 3A 49 UMR

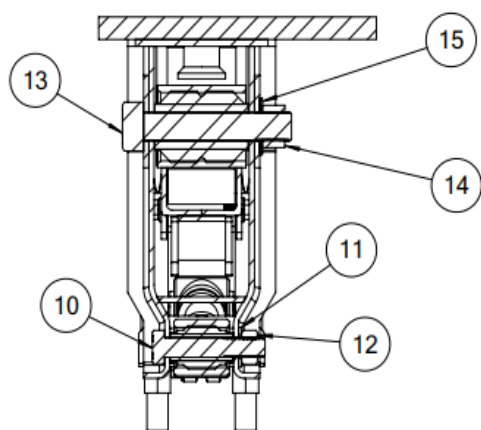
AE- Brand name

61- series of 6100

3A- Axle Configuration- Tridem Suspension

49- axle spacing

UMR- Undermount suspension



Technical drawing of a mechanical assembly showing a cross-section of a shaft with a key and a pulley. The key is labeled 17 and the pulley is labeled 18.

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NOTICE

The following section of this manual provides general procedures for the inspection, removal, installation, dis-assembly and reassembly of mechanical suspension assemblies. These procedures are intended for use by qualified service personnel familiar with heavy duty trailer suspension.

Before performing any service, verify that the suspension model has been correctly identified contained in this manual. Some suspension models may require manufacturer- specific procedures, special tools, or replacement parts that are not covered in this manual.

If the suspension assembly is covered by a manufacturer's warranty terms before performing repairs that could affect warranty coverage.

If the required repair procedure is not included in this manual or if structural damage or major component failure is identified, discontinue the repair and refer to the applicable suspension manufacturer's current service manual or contact the suspension manufacturer for technical assistance.

Improper service procedures, incorrect replacement parts, or failure to follow the specified installation and torque requirements may result in suspension damage, vehicle instability, serious personal injury or death.

Suspension Assembly & Dis-assembly

The recommended sequence for suspension service procedures is illustrated in the process flow chart located in the applicable section of this manual. Follow each step in the order shown to help ensure proper dis-assembly, inspection, assembly & installation.

Before any suspension service procedure, review the applicable troubleshooting section to assist in identifying the root cause of the reported condition.

During Service

The following inspections and precautions should be observed throughout the dis-assembly & re-assembly the process:

- Inspect all suspension components for signs of wear, cracks, corrosion, deformation or other damage.
- Replace damage or excessively worn parts. Do not reuse components that do not meet the serviceability requirements
- Always wear appropriate personal protective equipment (PPE).
- Support the trailer and suspension assembly using approved lifting & support equipment before beginning service.
- Handle suspension components carefully to prevent damage to machined surfaces, bushings, seals, and threaded fasteners.
- Inspect both sides of the suspension assembly, as damage or wear may not occur uniformly.
- Use only the specified service tools and approved replacement parts.
- Clean all mating surfaces and threaded connections before assembly
- Tighten all fasteners to specified torque values using calibrated torque equipment
- Verify component alignment and suspension operation before returning the trailer to service.

After Service

Upon completion of this service procedure:

- Verify that all suspension components have been correctly installed.
- Confirm that all the fasteners have been tightened to the specified torque values.
- Ensure the suspension moves freely without binding or interference.
- Verify axle alignment, ride height and suspension geometry in accordance with the applicable specifications.
- Perform a final visual inspection before returning the trailer to the service.

Preventative Maintenance

Proper preventive maintenance is essential to maximize suspension service life, maintain vehicle stability & ensure safe operation. Maintenance shall be performed in accordance with the trailer manufacturer's requirements and the applicable ATA/TMC Recommended practices.

Service Interval Maintenance Requirements

After the first 1000 miles
(1600 kms)

Perform an initial suspension inspection. Verify that all suspension fasteners are properly tightened to the specified torque. Inspect leaf springs, hangers, equalizers, U-Bolts, pivot connections, & shock absorbers (if equipped) for proper installation & all structural welds for signs of movement, cracks, corrosion, or other damage.

After the first 5,000 miles
(8,000 km)

Re-inspect all the suspension components. Re-torque all specified suspension fasteners to the applicable torque values listed in torque requirements section of this manual. Inspect for loose or worn components, cracked welds, bushing wear, spring damage, corrosion, axle alignment concerns, & abnormal tire wear. Correct any deficiencies before returning the trailer to service.

Every 30,000 miles (50,000
km) thereafter

Perform a comprehensive suspension inspection. Inspect all the structure components, bushings, spring assemblies, equalizers, hangers, torque rods (if equipped), air springs (if equipped), shock absorbers (if equipped), U-bolts, pivot hardware & mounting brackets. Replace any component that exceeds the manufacturer's wear limits or shows signs of damage.

SPRING SUSPENSION OPERATION & SAFETY

WARNING

DO NOT operate trailer with loose, broken or damaged springs.

DO NOT operate trailer with loose or damaged U-bolts.

DO NOT operate trailer with damaged bushings or hardware.

REQUIRED MAINTENANCE TO A.T.A. T.M.C. RECOMMENDED STANDARDS & PRACTICES

After the first 1000 miles or 1600km
After the first 5000 miles or 8300km
Every 30000 miles or 50000km THEREAFTER

RE-TORQUE REQUIREMENTS

Equalizer Pivot Bolt (1-1/4"-12)	-	1500 lbf-ft
Torque Rod	-	450 lbf-ft
7/8" U-bolt	-	450 lbf-ft
1" U-bolt	-	700 lbf-ft
1/2" bolts	-	90 lbf-ft

Before replacing any component on this suspension consult your service manual, or contact Allyaxle to ensure that only "Allyaxle Quality Parts" are used.

Phone: (705) 812 - 2982
Email: info@allyaxle.com



ALLYAXLE

ALLYAXLE
manufacturer of
Axle & Suspension Assemblies

Fig: Spring suspension operation & safety

General Inspection Requirements

At each scheduled maintenance interval:

- Verify that all the suspension fasteners are secure tightened to the specified torque.
- Inspect leaf springs for cracks, broken leaves, excessive corrosion, distortion or displacement.
- Inspect spring hangers & equalizers for cracks, deformation, elongated holes & damaged welds.
- Inspect bushings for excessive wear, deterioration, or abnormal movement.
- Inspect U-bolts and mounting hardware for looseness, corrosion, stretching, or thread damage.
- Inspect shock absorbers (if equipped) for cuts, abrasion, air leaks, dry rot & proper ride height.
- Inspect tires for normal wear patterns that may indicate suspension or alignment issues.
- Inspect the suspension assembly for signs of structural damage, loose components, or interference between the moving parts.
- Replace any damaged or excessively worn components before returning the trailer to the service.

NOTE: Maintenance intervals provided in this manual are intended as general service recommendations. Always follow the applicable ATA/TMC Recommended practice and any additional maintenance requirements established by the trailer manufacturer for the specific operating conditions.

Trouble shooting guide

Completing the following checks before disassembling suspension can help diagnose the problem before hand. It is also important to do all checks again after the suspension has been completely re-assembled to confirm all the step were completed.

- Any damage or wear throughout the suspension assembly.
- Check all suspension fasteners are present & properly seated
- Check U-Bolts, nuts & washers
- Check Lock nuts, lock washers, cotter pins retaining clips
- Check leaf springs for broken leaves, cracks, excessive corrosion, shifted spring packs or damaged center bolts.

Suspension Installation procedure

General Information

This procedure provides general installation instructions for a mechanical leaf spring suspension assembly. Before beginning the installation, verify that all suspension components are free from damage and correspond to the applicable suspension model and trailer configuration.

Frame Preparation

1. Position the front suspension hanger on trailer frame using the dimensions specified on the applicable suspension assembly drawing.
2. Secure the hanger by tack welding or an approved holding method.
3. Position the remaining suspension hangers according to the specified hanger spacing.
4. Verify all hangers are correctly aligned with the trailer centerline and are square to the frame.
5. After confirming all measurements, complete the hanger welds in accordance with approved welding specifications.

Axle Preparation

1. Position each axle so that the brake camshaft rotates in the same direction as the wheel during forward vehicle travel.
2. Install the axle seats onto the axle tubes with the mounting surfaces level & parallel.
3. Verify that the center-to-center distance between the axle seats matches the corresponding suspension hanger spacing.
4. Secure the axle seats.
5. Confirm proper alignment before completing the axle seat welds in accordance with the approved welding procedure.

Removal of Suspension Sub- Assembly

1. Park the trailer on a level surface, chock the wheels, and support the trailer and axle assembly using suitable lifting equipment and approved jack stands.



Support it using approved lifting equipment and jack stands. Failure to properly support the trailer may result in serious injuries or death.

2. Remove the load from suspension to relieve tension on the leaf springs and torque rods.
3. Loosen and remove the torque rod clamp bolts.
4. Loosen and remove the U-bolt nuts in an alternating (cross) pattern to evenly relieve the clamping force.
5. Remove the U-bolts and top plates from the axle assembly.
6. Carefully lift the axle from the leaf springs and remove the axle springs from the axle seats.
7. Remove the prevailing torque lock nuts, washers and mounting bolts securing the torque rods to the suspension brackets and axle brackets.
8. Remove the adjustable torque rods from the roadside as well as curbside.

NOTE: U-Bolts are designed for single use only. Once removed, they shall not be reused. Always install new MTH- approved U-Bolts during re-assembly and tighten them to specified torque values provided in the torque requirements section of this manual. Failure to replace U-bolts may result in loss of clamp load, suspension movement, component damage, or axle separation.

Installation of Suspension Sub- Assembly

1. Install adjustable torque rods on the roadside as well as curbside.
2. Insert the torque rod mounting bolts with the washers and prevailing torque lock nuts installed on the outer side of suspension.
3. Leave all torque rod fasteners loose to allow for final suspension alignment.
4. Position the leaf springs on the axle seats.
5. Install the top plates and U-bolts.
6. Verify that the springs are centered and equally positioned on both sides of the axle.
7. Tighten the U-bolts nuts to specified torque.

⚠ CAUTION Ensure the leaf springs are correctly seated before tightening the U-Bolts. Improper seating may result in suspension misalignment

8. Tighten the torque rod clamp bolts to the specified torque.

Removal of Suspension assembly

1. Park the trailer on a level surface, chock the wheels, & support the trailer and suspension assembly using suitable lifting equipment and approved jack standards.

2. Relieve the load from suspension before removing any suspension components.
3. Loosen and remove the torque rod mounting bolts, then disconnect the torque rods from suspension hangers.
4. Loosen and remove the lock nuts and washers from the spring rebound bolts.
5. Remove the spring rebound bolts from the equalizer assembly.
6. Carefully disengage the front and rear spring assemblies from the equalizer assembly.
7. Remove the front and rear spring assemblies from the suspension.

Installation of Suspension Assembly

1. Position the front and rear spring assemblies into the suspension.
2. Ensure the spring lips are correctly seated within the equalizer assembly.
3. Install the spring rebound bolts through the equalizer
4. Install the washer and lock nuts.
5. Tighten the rebound bolt nuts until the bolts are snug while allowing free rotation if contacted by the spring lip.
6. Connect the torque rods to the suspension hangers.
7. Tighten the torque rod mounting bolts to the specified torque.

Suspension Alignment

1. Lower the trailer until the suspension supports the trailer weight at its normal ride height.
2. Verify that the suspension is free to articulate without interference or binding.
3. Measure the distance from the kingpin center to the centerline of the front axle on both sides of the trailer.
4. Verify that the front axle is square with the trailer frame.
5. Measure the axle spacing between each axle centerline.
6. Adjust the rear axle position using the adjustable torque rod until equal measurements are obtained on both sides of the trailer.
7. Tighten all the adjustable torque rod clamps fasteners to the specified torque.
8. Recheck the suspension alignment after all fasteners have been tightened.

⚠ CAUTION Perform suspension alignment only with the trailer at normal ride height. Alignment performed with the suspension unloaded may produce incorrect axle geometry.

Final Inspection

1. Verify that all the suspension fasteners have been tightened to the specific torque values.
2. Inspect all welded joints for compliance with the applicable welding specifications.
3. Confirm that all suspension components are correctly installed and securely fastened.
4. Verify that the suspension is centered within the trailer frame and operates freely throughout its full range of travel.
5. Confirm that the trailer is at the specified ride height before placing the vehicle into the service.

Installation Verification

Before the trailer is placed into service, verify the following:

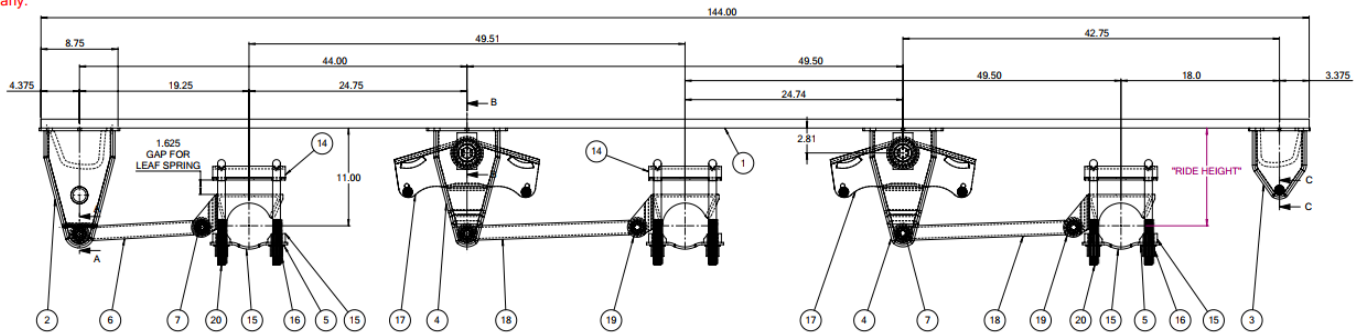
1. Suspension hangers are securely attached to the trailer and frame.
2. Axle seats are correctly aligned and welded.
3. Leaf springs are properly seated.
4. Equalizers articulate freely.
5. Torque rods are correctly installed.
6. U-bolts and suspension fasteners have been tightened to the specific torque.
7. No component interference or abnormal movement is present.

CAD MODEL OF UNDERMOUNT SUSPENSION ASSEMBLY

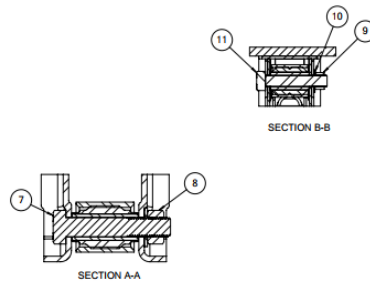
CONFIDENTIAL

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REVISIONS			
ZONE	REV.	DESCRIPTION	DATE
C		AE6SUX WAS AE64UX	8/21/2024
D		RELEASE IN NEW VAULT	5/21/2025
			JM



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TRAILER BED	REFERENCE - TRAILER BED	1
2	AE6101	UNDERMOUNT FRONT HANGER	2
3	AE6002	UNDERMOUNT REAR HANGER	2
4	AE6103	AE6103 EQUALIZER HANGER	4
5	AE6419 WASHER 0.875 INCH	FLAT WASHER 7/8"	24
6	AE6485A	RIGID TORQUE ROD ASSY 14" NOMINAL	1
7	AE6409	TORQUE ROD BOLT 7/8 - 9 UNC X5"	11
8	AE6410	TORQUE ROD LOCK NUT 7/8 - 9 UNC	12
9	AE6029-3	EQUALIZER LOCK NUT STOVER STYLE 1-1/4-12UNF	4
10	AE6029-4	1 1/4 FLAT WASHER FOR EQUALIZER	4
11	AE6029-2	EQUALIZER BOLT 1/4X2 UNF X 7"	4
12	AE6413	SPRING REBOUND BOLT 1/2-20 UNF 2A	10
13	AE6414	SPRING REBOUND LOCKNUT	10
14	AE6490	SPRING TOP PLATE ASSY - UNDERMOUNT	3
15	AE6420	BOTTOM PLATE	6
16	AE6418	HI NUT FOR U-BOLT -7/8 14 UNF 2B	12
17	AE6021A	49" EQUALIZER BEAM ASSY CW BUSHING	4
18	AE6427A	RIGID TORQUE ROD ASSY - 19.38" NOMINAL	2
19	AE6416A	1" AXLE SEAT UNDERMOUNT ASSY	6
20	AE65UA	U BOLT FOR UNDERMOUNT 7/8-14 BY Length 11.00" X Width 3.00"	12
21	AE6436A	ADJUSTABLE TORQUE ROD ASSY - 14" NOMINAL	1
22	AE6083A	ADJUSTABLE TORQUE ROD ASSY - 20375" NOMINAL	2



RIDE HEIGHT OPTIONS

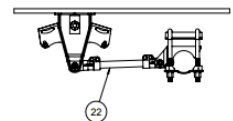
Refer to ride height chart for spring and ride height options

MODEL NO.	AXLE SEAT HEIGHT	AXLE SEAT	U-BOLT
AE613A49UMA	1"	AE6416A	AE65UA
AE613A49UMB	2"	AE6416B	AE65UB
AE613A49UMC	3"	AE6416C	AE65UC

SPECIAL NOTE:

Secure the torque arms (adjustable on road, left side, item 21 or 22 and rigid on curb, right side item 6 or 20) to the front

See detail A and Detail B



NOTES:

MATERIAL: SEE COMPONENTS

		DATE	8/21/2024	BY	JM	MTI MANUFACTURING INC.
DRAWN		DATE	8/21/2024	BY	JM	MTI MANUFACTURING INC.
CHECKED		DATE	8/21/2024	BY	JM	MTI MANUFACTURING INC.
APPROVED		DATE	8/21/2024	BY	JM	MTI MANUFACTURING INC.
TITLE		49" UNDERMOUNT TRIDEM ASSY				
SCALE		SCALE 1:100 (40" X 160")				
SHEET		1 OF 1				

Undermount suspension service installation procedure

Frame Preparation

1. Position the front hangers on the trailer frame using the dimensions specified on cad model.
2. Secure the front hangers using tack welds or the approved holding method.
3. Position the undermount rear hangers according to the dimensions specified on the applicable MTH suspension assembly drawing.
4. Position the equalizer hangers according to the specified hanger spacing and trailer centerline.
5. Verify that all suspension hangers are correctly aligned with the trailer centerline and are square to the trailer frame.
6. Complete the hanger welds in accordance with the approved MTH welding procedure.

Axle Preparation

1. Position each axle so that the brake camshaft rotates in the correct direction for forward vehicle travel.
2. Verify that the axle is correctly identified for the applicable undermount suspension configuration.
3. Install the applicable undermount axle seats onto the axle tube according to the suspension model and required ride height configuration.
4. Verify that the axle seats are correctly positioned, level, parallel, and aligned with the suspension hanger locations.
5. Verify that axle seat center to center spacing corresponds with the applicable suspension assembly drawing.
6. Secure the axle seats in the specified position.
7. Verify the axle seat orientation and dimensions before completing the axle seat welds.
8. Complete the axle-seat welds in accordance with the approved MTH welding procedure.

Removal of Suspension sub assembly

1. Support the trailer frame, axle and suspension assembly with approved lifting equipment and rated jack stands.
2. Remove the torque rods and spring rebound hardware from the suspension assembly.
3. Remove the equalizer pivot hardware and carefully remove the equalizer beam assemblies.

4. Remove the leaf springs from the front, rear and equalizer hangers supporting the springs during removal.
5. Inspect all the suspension components and hardware for wear, cracks and deformation or damage, replace as required with MTH- approved components.

Installation of suspension sub assembly

1. Position the equalizer beam assembly with bushing between the equalizer hangers and align the bushings with hanger pivot holes.
2. Install the equalizer bolt, washer, and lock nut through the equalizer hanger and bushing and verify that the equalizer beam is centered and moves freely.
3. Position the leaf springs into the front/rear hanger and equalizer locations, ensuring that the springs are correctly oriented and properly seated.
4. Install the spring rebound bolts and locknuts as specified on MTH drawing.
5. Verified the leaf spring gap shown on the CAD model before continuing with the suspension assembly.
6. Install the undermount spring top plate assembly over the leaf spring and position the bottom plates in the correct orientation as shown on the CAD model.
7. Position the axle assembly onto the leaf springs and verify that the axle is fully seated against the applicable undermount axle seats and that the spring center bolts are correctly engaged with the axle seats

that the spring center bolts are correctly engaged with the axle seat locating features.

8. Install the applicable undermount U-Bolts, washers, and high nuts, then tighten the U-Bolts nuts gradually and evenly in an alternating pattern to properly seat the spring and plates.
9. Verify that the suspension sub-assembly is correctly installed, including equalizer and spring seating, axle seat engagement, spring gap, correct U-bolt installation, and free suspension movement, before proceeding to final torque and alignment.

⚠ DANGER

Use approved lifting equipment and rated jack stands before removing U-bolts, torque rods, springs, or suspension hardware. Stored suspension load may cause sudden movement, resulting in serious injury or death.

Removal of Axle and U-bolts

1. Support the axle assembly with approved lifting equipment and rated jack stands before removing the U-bolts.
2. Loosen and remove the U-bolt nuts and washers in an alternating cross pattern to evenly release the clamping force.
3. Remove the U-bolts, top plates and bottom plates from the axle and leaf spring assembly.
4. Carefully lift and remove the axle from leaf springs and axle seats.
5. Inspect the U-bolts, axle seats, plates and leaf springs for damage or wear, replace removed U-bolts with new MTH approved U-bolts.

Installation of Axle and U-Bolts

1. Position the axle assembly onto the leaf springs and ensure the axle is fully seated against the undermount axle seats.
2. Verify that the spring center bolt is correctly engaged with the axle seat locating feature.
3. Install the applicable undermount U-bolts around the axle and through the spring top/bottom plate assembly.
4. Install the specified U-bolt washers and high nuts onto each U-bolt.
5. Tighten the U-Bolt nuts gradually and evenly using a cross pattern (1-3-2-4) to ensure that the spring plates seat correctly. (as shown in fig)

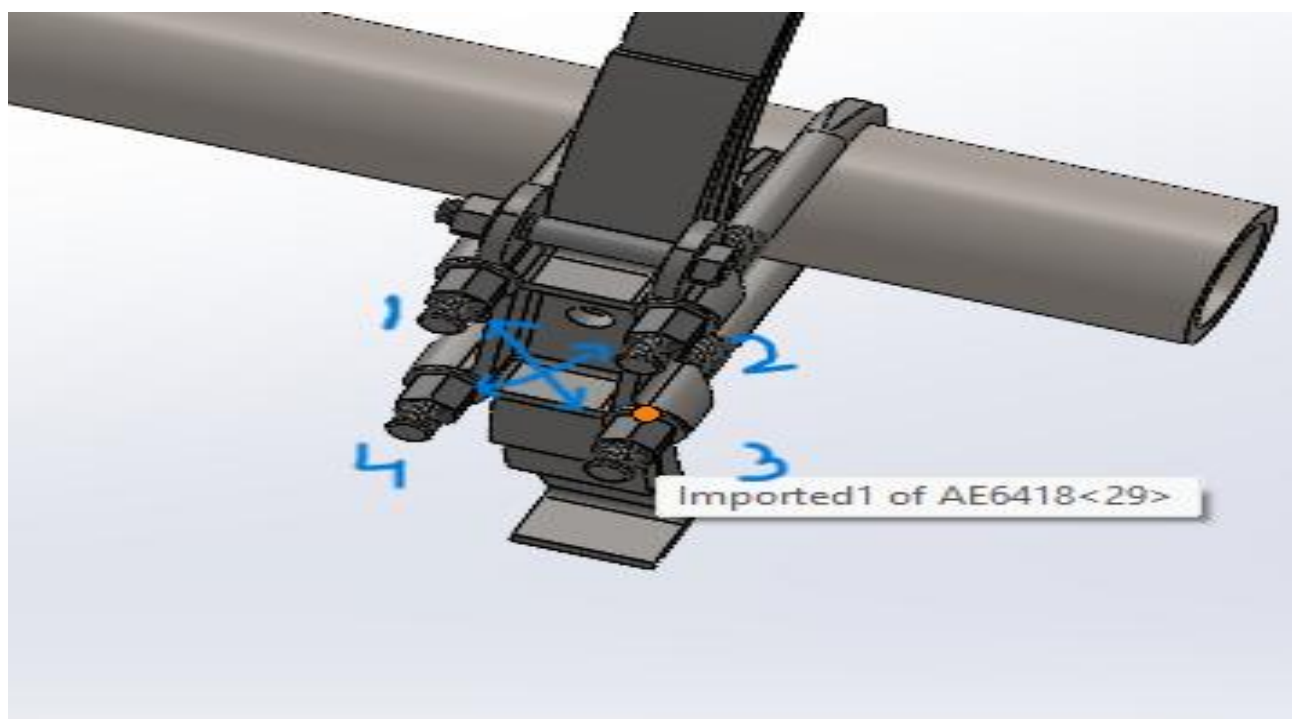


Fig 1. U-bolt nuts cross pattern tightening

6. Verify that the leaf spring remains properly seated while tightening the U-bolts.
7. Tighten the U-bolt nuts to the specified MTH torque value using a calibrated torque equipment.
8. Verify the final U-bolt after the suspension has been correctly seated.
9. Apply a torque witness mark final torque verification.

⚠ CAUTION Loosen U-bolt nuts gradually in an alternating cross pattern to safely release the clamping force. U-bolts are single-use and must not be reused. Install new MTH-approved U-bolts during reassembly.

Removal of Torque Rods

1. Support the axle and suspension assembly with approved lifting equipment and rated jack standards.
2. Remove the lock nuts and washers from the torque rod mounting bolts.
3. Support the torque rod and remove the mounting bolts from the suspension mounting points.
4. Carefully remove the rigid and adjustable torque rods, keeping personnel clear of pinch points.
5. Inspect the torque rod, bushing bolts and hardware for wear, cracks, deformation, or damage, replace as required with MTH approved components.

Installation of Torque rods

1. Identify the road/left side and the curb/right side of the trailer before installing the torque rods.
2. Install the adjustable torque rod on the road left side as well on the right side of the suspension.
3. Position the torque rods so that they are secure toward the front of the trailer, as specified on the MTH drawing.
4. Install the torque rod bolts, washer and lock nuts.
5. Verify that the torque rods are installed on the correct side and in the correct orientation before final tightening.
6. Tighten the torque rod fasteners to the specified MTH torque value using calibrated torque equipment with the trailer in its normal service position and the wheels on the ground.
7. Verify the adjustable torque rod remains available for final axle alignment adjustment.

Suspension Alignment

1. Place the trailer at its normal operating ride height before performing the final suspension alignment.
2. Verify that all the suspension components are properly seated and that the suspension moves freely without binding.
3. Measure the front axle position from the applicable trailer reference point on both the sides of the trailer.
4. Verify that the front axle is square to the trailer frame.
5. Measure the axle centerline to centerline spacing and compare the measurement with the applicable MTH drawing.

6. Adjust the applicable adjustable torque rod to obtain the required axle alignment.
7. Tighten the adjustable torque rod after the required alignment has been achieved.
8. Recheck the axle alignment after final torque is applied to confirm that the axle position has not changed.

Final Inspection

1. Verify the suspension components are correctly installed according to the applicable MTH drawing and BOM.
2. Verify that all suspension fasteners including equalizer bolts, rebound hardware, torque rod hardware, & U bolt nuts are installed and tightened to the specified torque.
3. Verify that the U-bolts are correctly positioned, fully engaged with the nuts and properly clamping the leaf spring, axle seat and suspension plates.
4. Verify that the leaf springs are correctly oriented and fully seated, and that the specified leaf spring gap is maintained.
5. Verify that the correct undermount axle-seat configuration is installed for the specified ride height and that axle is properly seated and aligned with the suspension.
6. Verify that the adjustable torque rod is applied on both the sides roadside as well as the curb side & with both torque rods oriented towards the front of the trailer.

7. Verify that the suspension and equalizer assemblies move freely without binding, interference, abnormal contact or restricted movement.
8. Verify that the axle alignment and suspension ride height meet the applicable MTH drawing requirements after final torque adjustment.
9. Inspect all the applicable welds and components for cracks, damage or visible defects, verify that torque witness marks are present, and complete the final inspection before releasing the assembly.

Service Precautions & Technical Assistance

Suspension Service Precautions

If abnormal suspension operation is detected during vehicle operation, the vehicle should be brought to a safe stop as soon as conditions permit. Park the trailer on a level surface away from traffic, apply the parking brakes, chock the wheels, and follow all applicable safety procedures before performing any inspection.

 DANGER Support the trailer using approved lifting equipment and jack stands. Failure to properly support the trailer may result in serious injuries or death.

The suspension should be visually inspected for conditions including, but not limited to:

- Broken or cracked leaf springs
- Loose, missing or damaged fasteners
- Cracked or damaged hangers, equalizers, or torque rods
- Loose or damaged U-bolts
- Excessive suspension movement or alignment
- Signs of abnormal tire wear or axle misalignment
- Evidence of frame or suspension component damage

TORQUE REQUIREMENTS

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Components	Torque (lb-ft)
Equalizer Pivot Bolt (1-1/4"-12)	1500
Torque Rod Clamp Bolt (7/8")	450
7/8" U-bolt	450
1" U-bolt	700
Torque rod yoke bolts (1/2")	90
Spring rebound bolt (1/2")	50

The torque rod U-bolts does not get exactly tightened to 90 lb-ft, but the principle is the spring when encounters the spring retainer bolt and it will turn in the hole and roll to allow the spring to slide along without friction (rolling motion).

NOTE: Unless otherwise specified, all the torque values in this manual apply only to genuine MTH manufacturing suspension assemblies and associate service procedures. Replacement components or proprietary parts supplied by other manufacturers may have unique installation requirements, lubrication practices, or torque specifications that differ from above listed in this manual. Technicians shall verify and follow the latest service instructions provided by the component manufacturer whenever servicing non MTH components. In event of any discrepancy, the component manufacturer's published specifications shall supersede those contained in this manual.