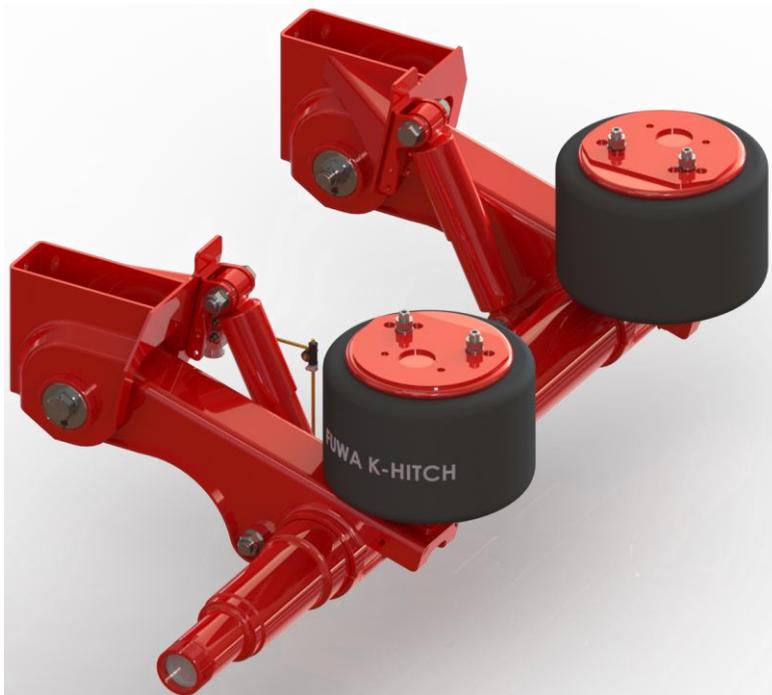


## KIS AXLE & AIR SUSPENSION MODULE (wide Pivot Bush)



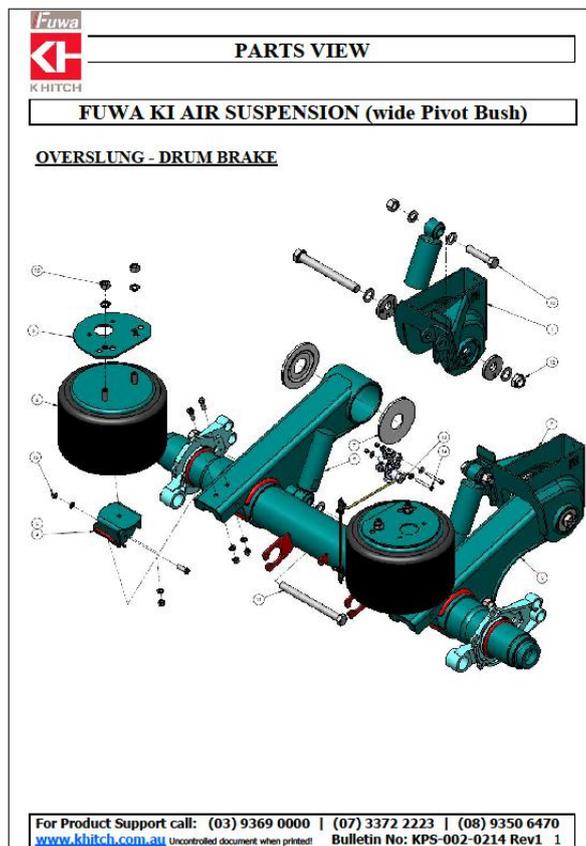
### Contents

1. Pre-assembly Considerations
2. Welding Instructions – Chassis Connection
3. Tightening Instruction
4. Axle Alignment
5. Maintenance

# INSTALLATION, MAINTENANCE & SERVICE BULLETIN

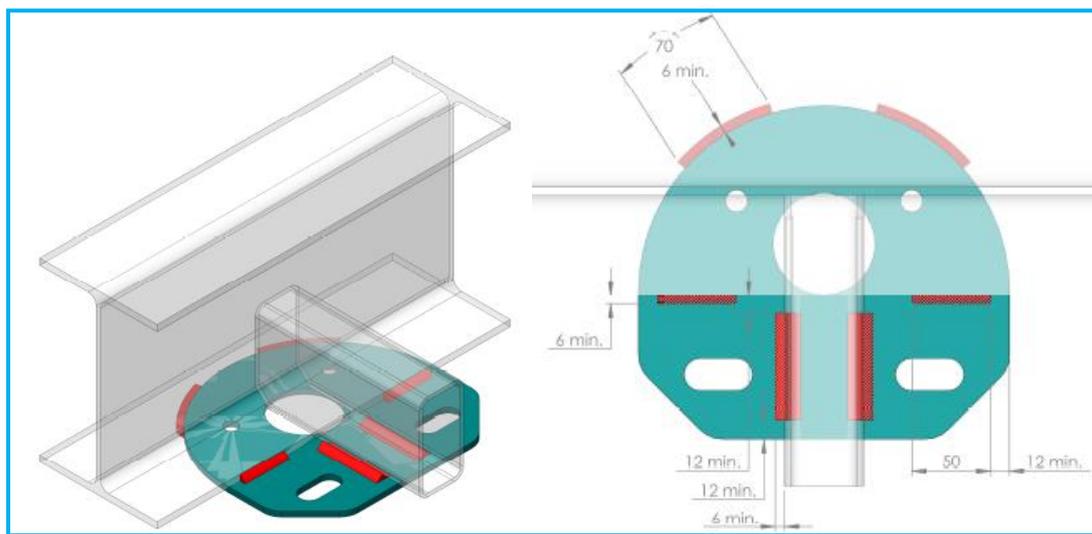
## 1. Pre-assembly Considerations

- Check if the correct parts have been supplied
- Check the installation drawings match the parts supplied
- There is a difference in the requirement for the rod length on the brake chamber (booster) between the short and the long cam KI models, with the short cam model requiring a longer rod.  
 24/30 and 30/30 brake chamber cannot be fitted to the 5” holes in the bracket!  
 The brake chambers should have the air connection ports at 90° (out the side, not on top).  
 When installing the brake chambers (boosters), check the bulletin KPM-001-1016 for the correct booster rod length.
- Ride height, hubs, wheel and tyre size need to suite the application
- Check that the correct tools and equipment are available to do the installation.
- For any parts identification and requirement, refer to the FKH PV: KPS-002-0214
- Only qualified personnel should be in charge of the installation.

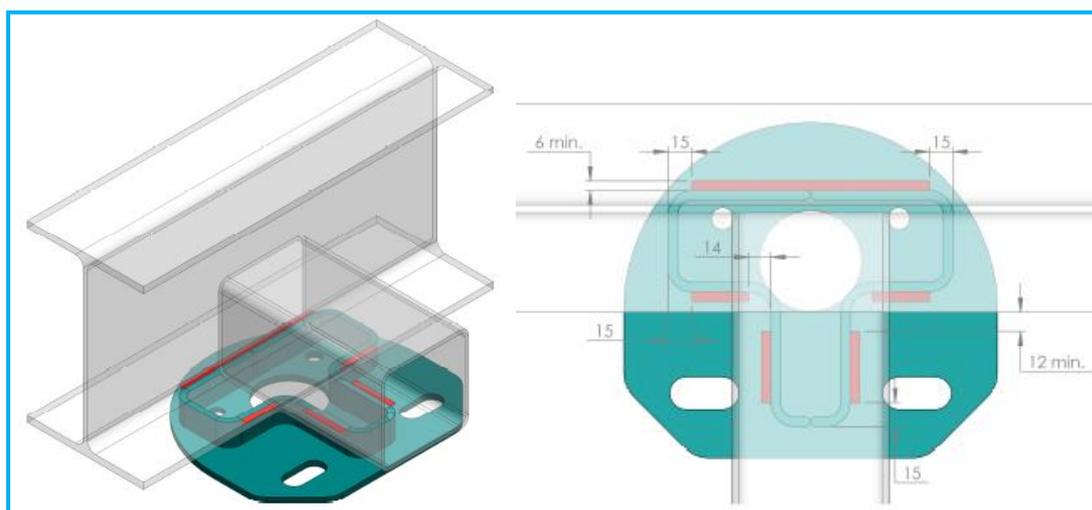


## 2. Welding Instruction – Chassis Connection

### AIR SPRING MOUNTING



Mounting Plate without Spacer



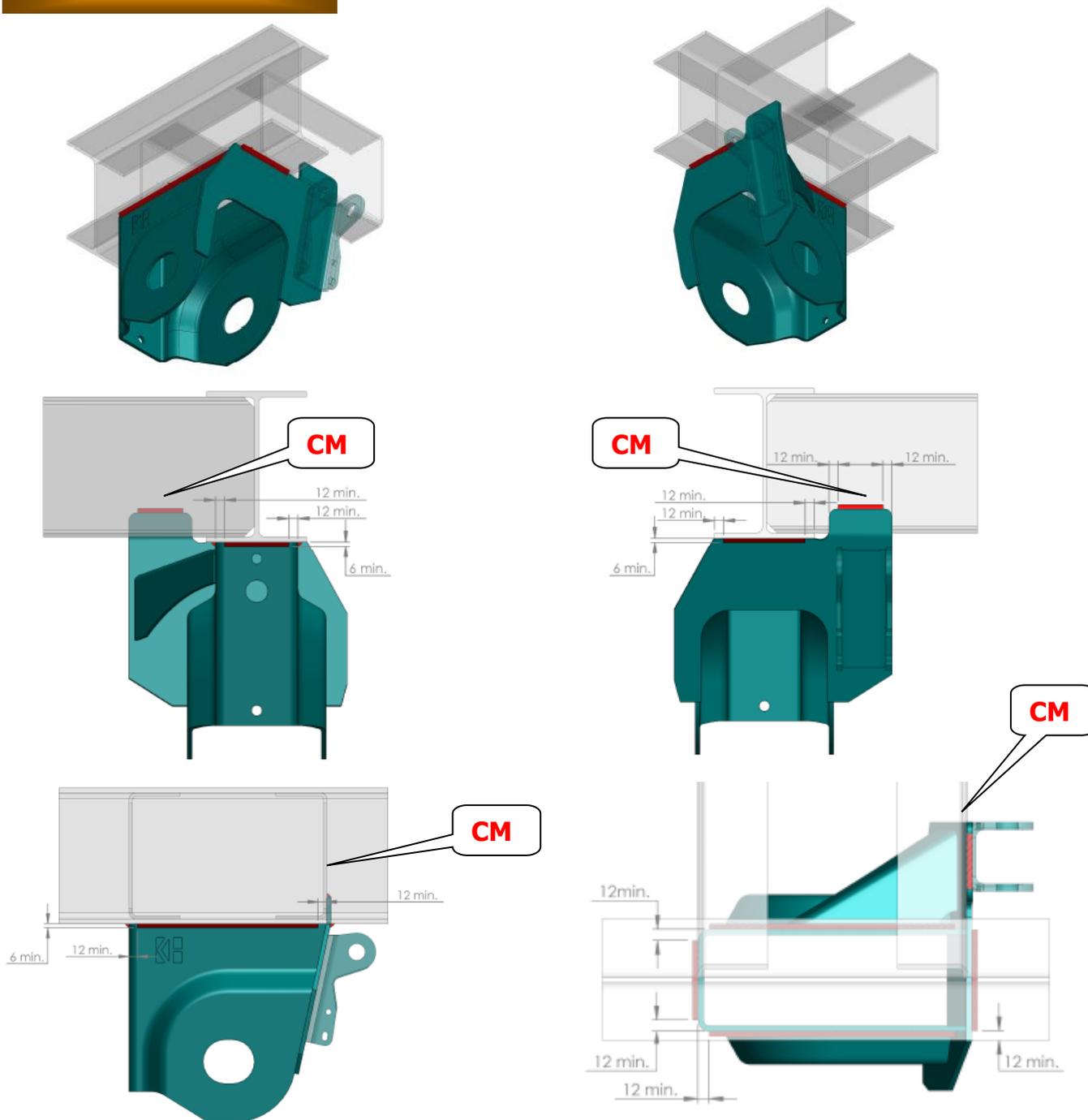
Mounting Plate with Spacer

**! IMPORTANT:**

- Do not weld within 12mm between mating edge of the suspension component and trailer frame.
- It is the responsibility of the suspension installer to provide both proper welding parameters and adequate attachment for the suspension.
- Do not attach air spring direct to trailer frame.

# INSTALLATION, MAINTENANCE & SERVICE BULLETIN

## HANGER MOUNTING



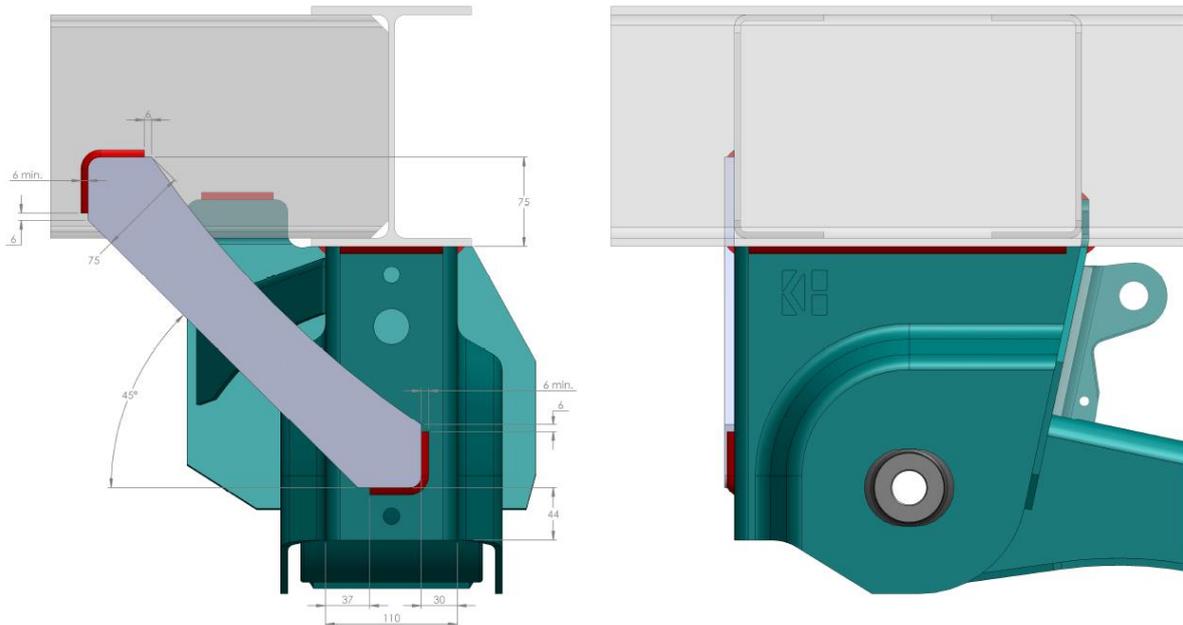
**! IMPORTANT:**

- Do not weld within 12mm between mating edge of the suspension component and trailer frame.
- Insure that the left and the right hangers are welded on the same perpendicular line to the chassis. (Axle alignment)

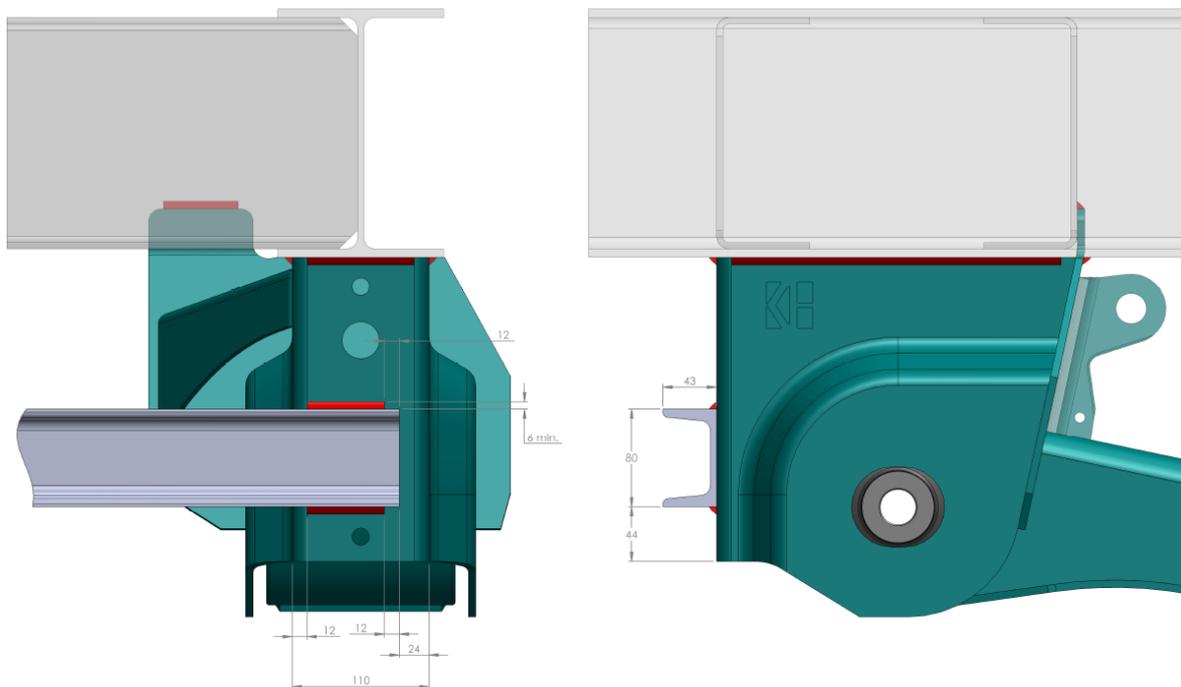
# INSTALLATION, MAINTENANCE & SERVICE BULLETIN

- Insure the shocker bracket tab is welded and supported against a cross member. (CM)

**IMPORTANT**  **HANGER CROSS BRACING**  **IMPORTANT**

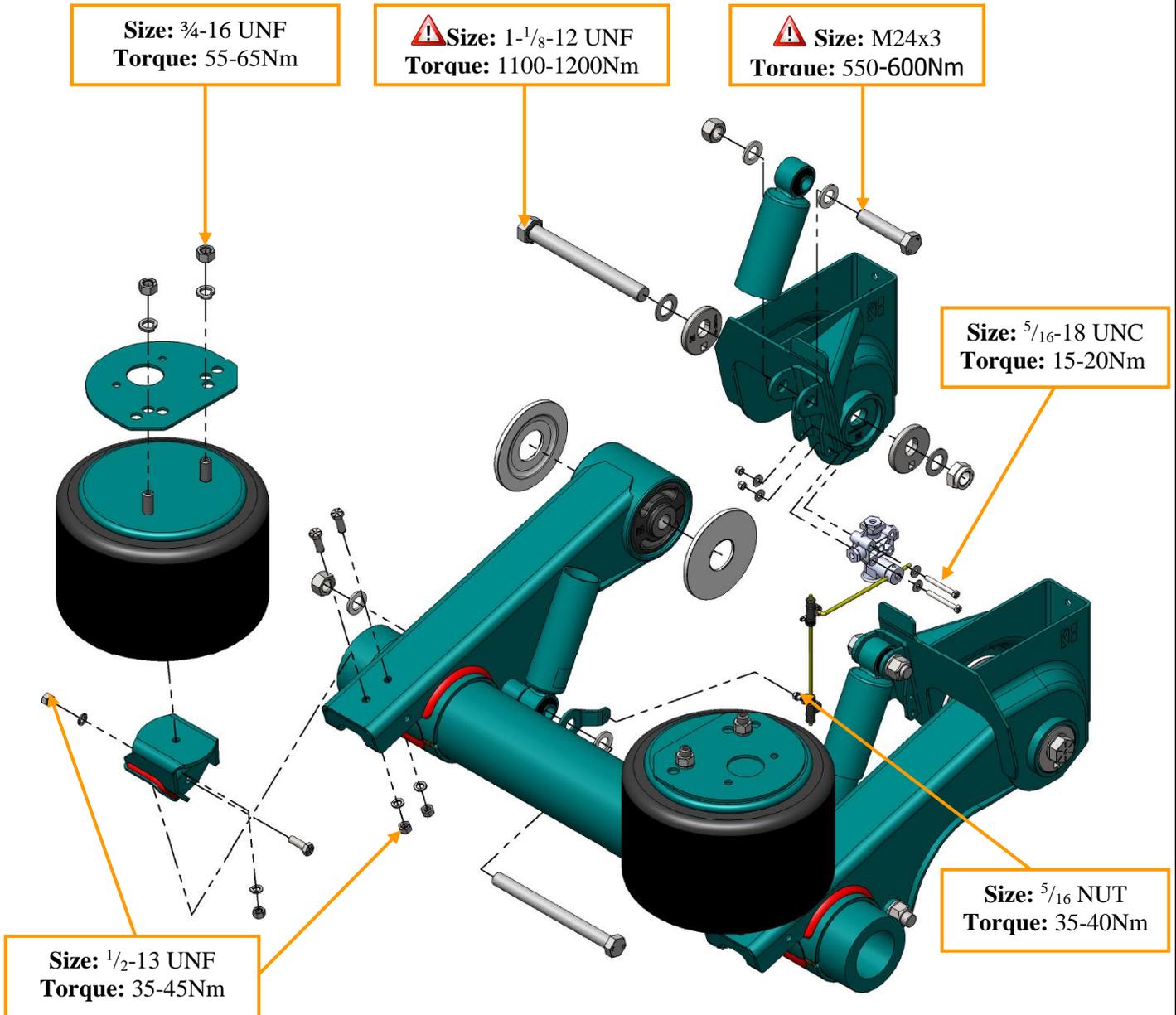


Knee Bracket from Hanger to Cross Member



C-Channel from Hanger to Hanger

## 3. Tightening Instruction



**⚠️ IMPORTANT:**

- Shock absorber & hanger pivot bolts must be tightened at ride height.

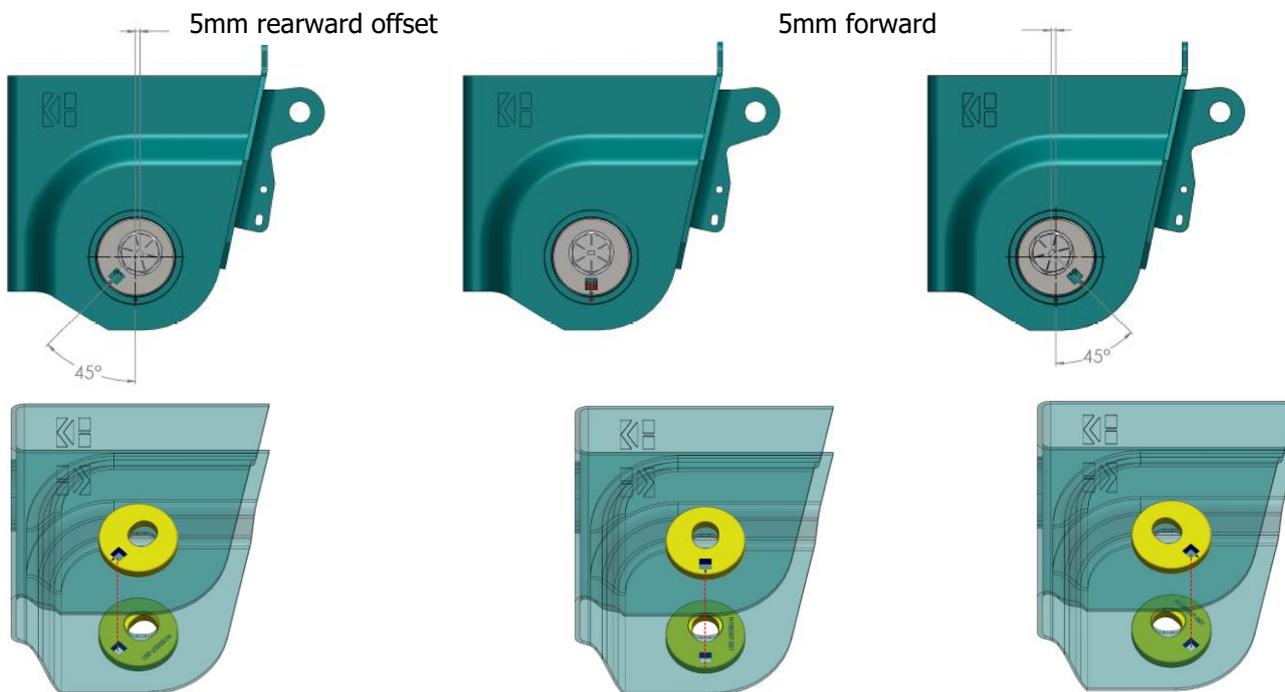
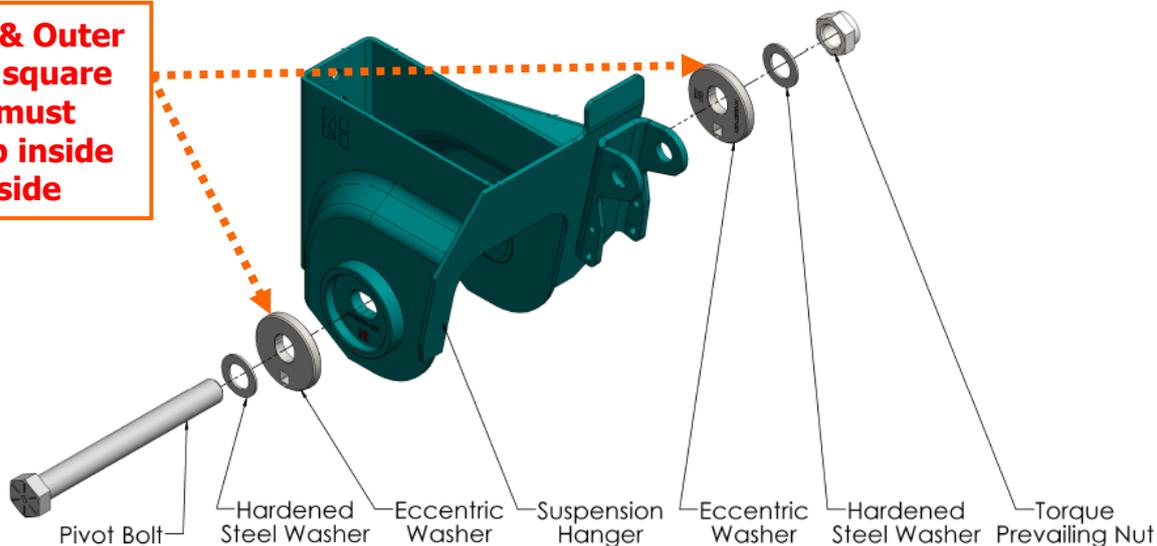
**⚠️ CAUTION:**

- Over torque could result in fastener failure.
- Failure to follow properly torque can result in loss warranty coverage.

# INSTALLATION, MAINTENANCE & SERVICE BULLETIN

## Pivot Alignment

**Inner & Outer  
 Collar square  
 holes must  
 line up inside  
 to outside**



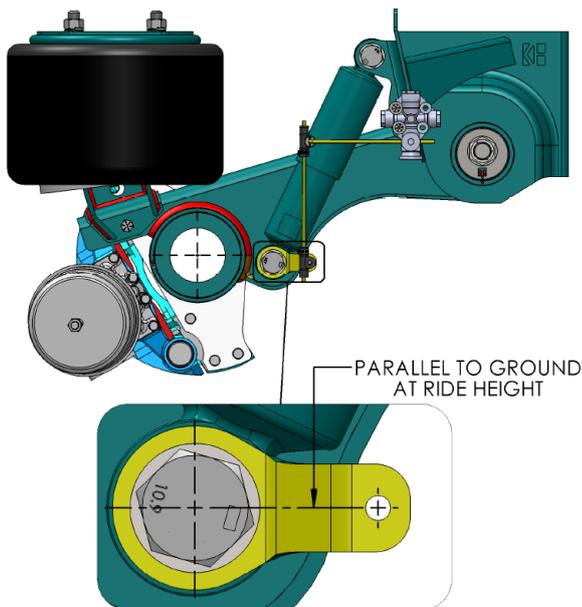
**⚠ IMPORTANT:**

- Do not fully torque up pivot bolt until suspension is fully aligned. Before alignment, tighten up pivot bolt to a point where hardened washers can still rotate freely.

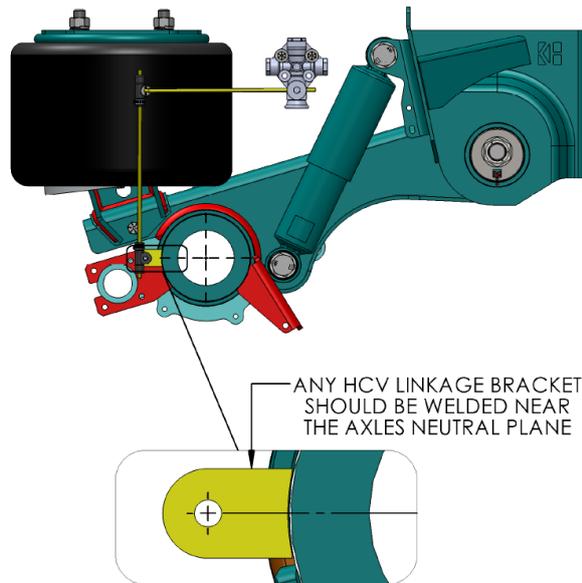
# INSTALLATION, MAINTENANCE & SERVICE BULLETIN

- Adjust all four eccentric collars to achieve suspension alignment

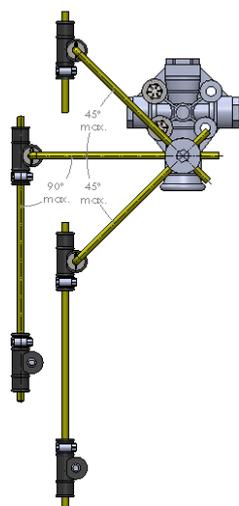
## HCV Setting



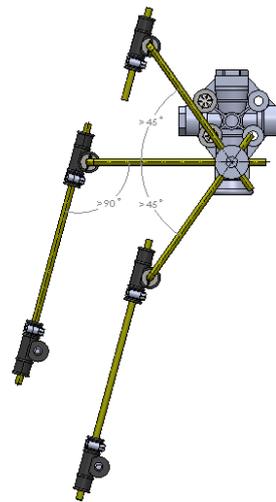
**OVERSLUNG – DISC** (RIDE HEIGHT)



**OVERSLUNG – DRUM** (RIDE HEIGHT)



CORRECT SETUP



INCORRECT SETUP

### IMPORTANT:

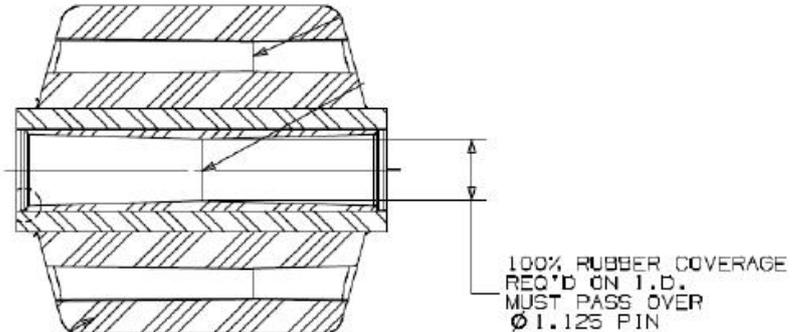
- HCV can be used in right-hand or left-hand.
- Unless approved by Fuwa K Hitch, DO NOT use more than one HCV per trailer.



## INSTALLATION, MAINTENANCE & SERVICE BULLETIN

- **DO NOT** use a pipe compound or teflon tape. They may contaminate the air system.

### Pivot Bolt and Trailing Arm Bush



The  $\text{Ø } 1 - 1/8''$  bolt should be tight in the centre of the sleeve and have a gap at each end of the sleeve.

The reason for that is that the rubber coating on the inside of the sleeve tapers from the middle at a little less than  $\text{Ø } 1-1/8''$  out to approx.  $\text{Ø } 1- 5/16''$  at each end.

The purpose of the tapered inside rubber coating is, to prevent the steel bush rusting to the hanger pivot bolt.

The bush (and the connected trailing arm) is securely locked in to position after the hanger pivot bolt is tightened to the required torque of 1100-1200Nm.

Note: There are other trailing arm bushes which do not have the internal rubber coating in the steel bush.

## 4. Axle Alignment

The following steps are to ensure that proper axle and suspension alignment is achieved.

- The trailer must be in straight line and on smooth level surface.
- Release the brakes.
- Check that the tyres are the same size and have equal inflation pressure.
- Set the suspension to the correct ride height.
- Align all axles within the tolerances shown in Fig. A.
- Torque the hanger pivot bolt to 1100-1200Nm.
- Re-check the alignment at the 1<sup>st</sup> Service (5000-10000Km or 2-4 weeks)

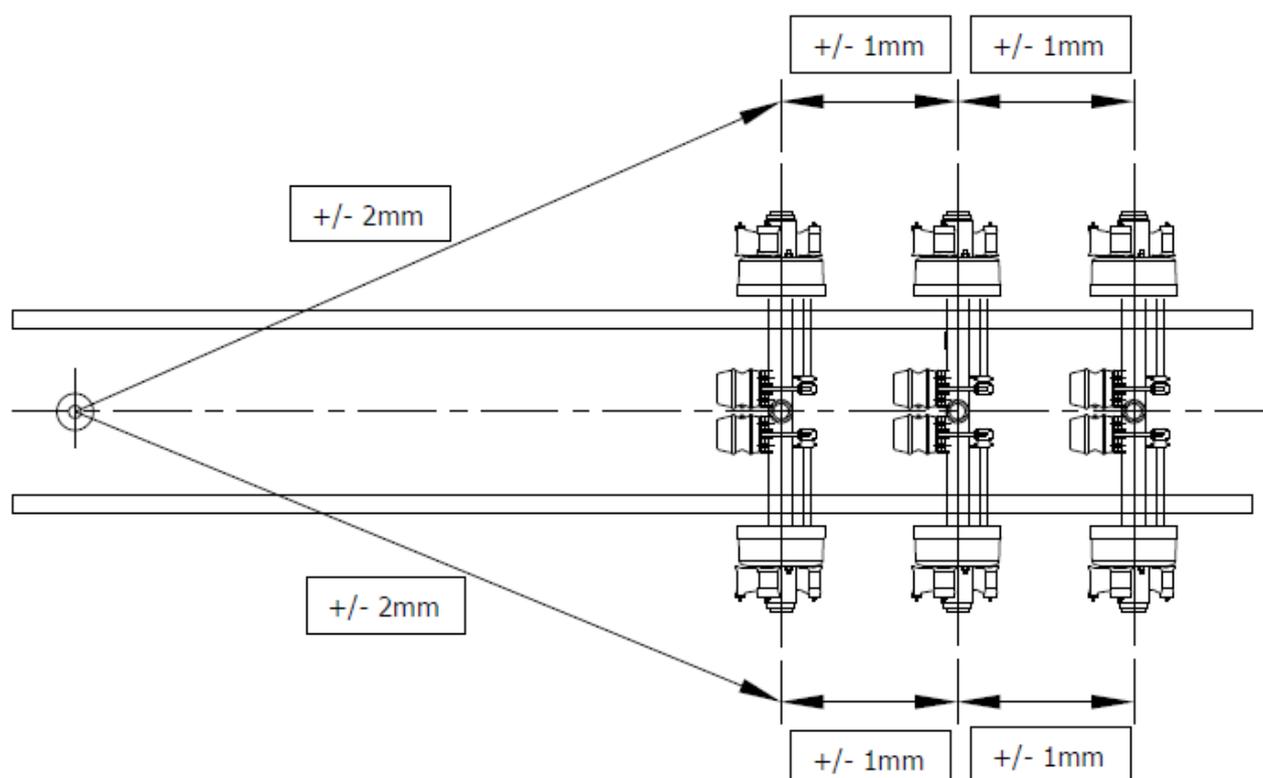


Fig A

# INSTALLATION, MAINTENANCE & SERVICE BULLETIN

## 5. Maintenance

The maintenance frequency may need to be changed subject to the application and vehicle operating conditions.

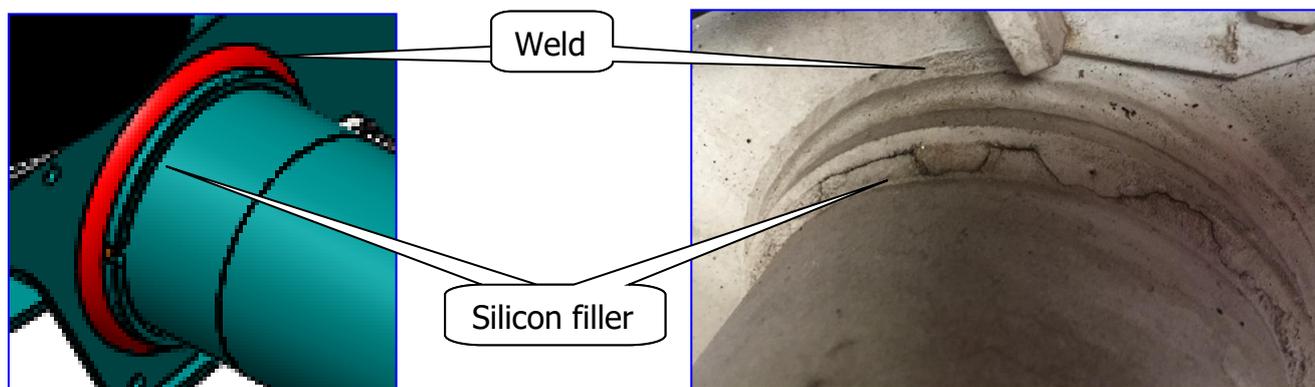
Any instructions from the vehicle OEM must be considered first.

For the suspension part of the module:

<ol style="list-style-type: none"> <li>1. Check all the fasteners</li> <li>2. Check shock absorbers* and shocker bushes</li> <li>3. Check HCV for leaks and correct adjustment</li> <li>4. Check hanger pivot bolt, pivot bush and hanger wear pads for wear and excess movement.</li> <li>5. Check air springs for leaks or damage.</li> </ol>	<p>PD</p>	<p>1<sup>st</sup> Service</p>	<p>½ yearly</p>
		<p>1<sup>st</sup> Service</p>	<p>Annually</p>
		<p>1<sup>st</sup> Service</p>	<p>Annually</p>
			<p>Annually</p>
		<p>1<sup>st</sup> Service</p>	<p>Annually</p>

Note: The above recommendations are for “On HWY only” applications.

Note: Weld vs Silicon filler

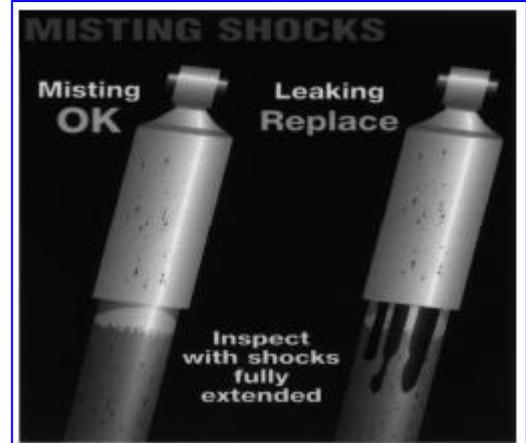


Do not confuse the silicon filler on the edge of the axle sleeve with an actual weld on the trailing arm to the sleeve.

That silicon filler may dry out over time and cracks may appear. There is need for concern.

# INSTALLATION, MAINTENANCE & SERVICE BULLETIN

Note: \* In regards to shock absorbers “leaking”. Do not confuse “misting” and “sweating” with leaking. Only a leaking shock absorber (oil running down the length of the shocker body) needs to be replaced.  
 If in doubt, clean the shock absorber and check it again after a few days.  
 Shock absorbers are a wearing item and they will need replacing eventually.



For the axle part of the module:

Follow the information contained in  
 Bulletin: **KPM-004-0310**

**Fuwa**  
  
**KHITCH**

**INSTALLATION, MAINTENANCE  
 & SERVICE BULLETIN**

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**AXLE MAINTENANCE**

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This bulletin covers the standard adjustable TP and TN bearing styles.

For ConMet Preset bearing-hub information, please use also Bulletin:  
 ConMet SERVICE MANUAL 10084476REV10

For SKF Unitised bearing-hub information, please use also Bulletin:  
 KPM-005-0310

For Product Support call: 03 9369 0000 | 07 3372 2223 | 08 9350 6470  
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