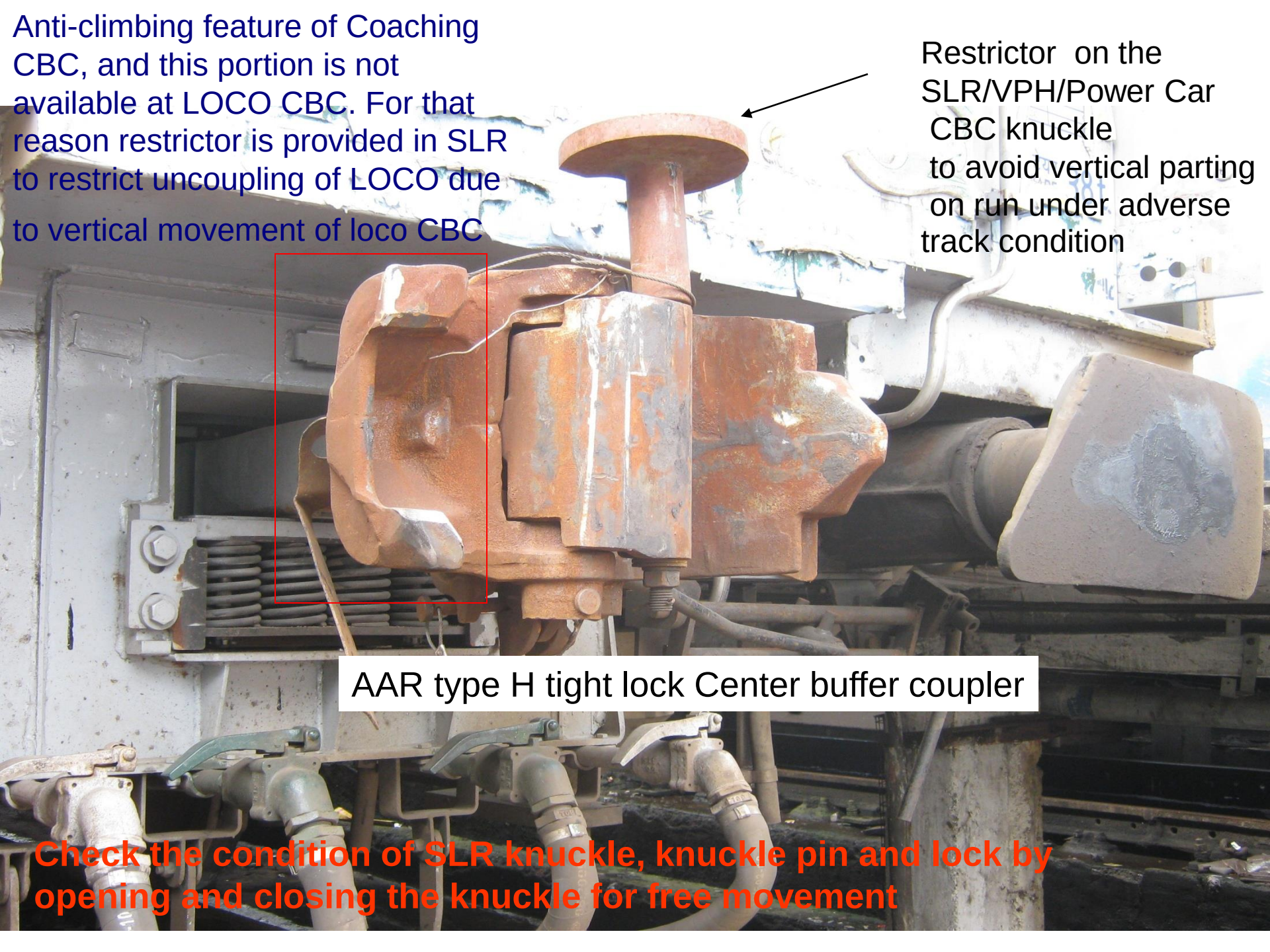
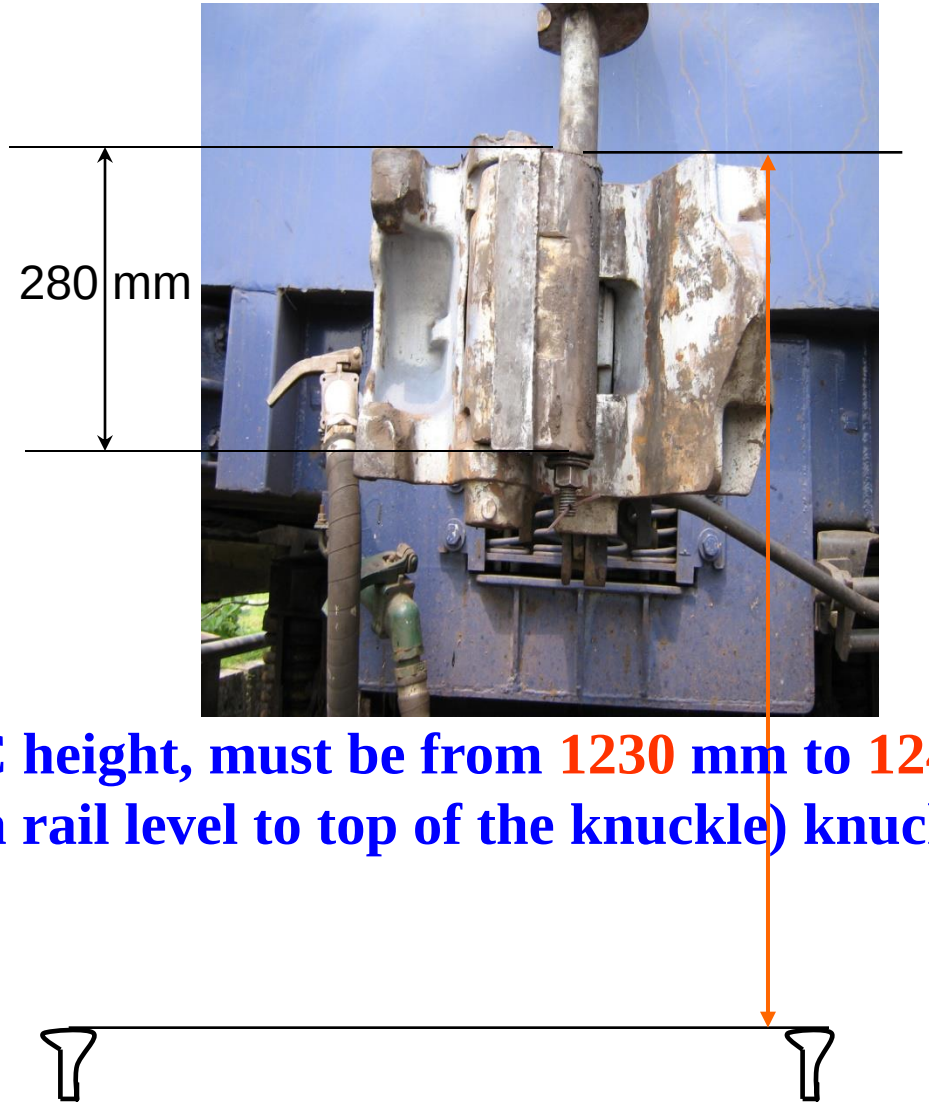
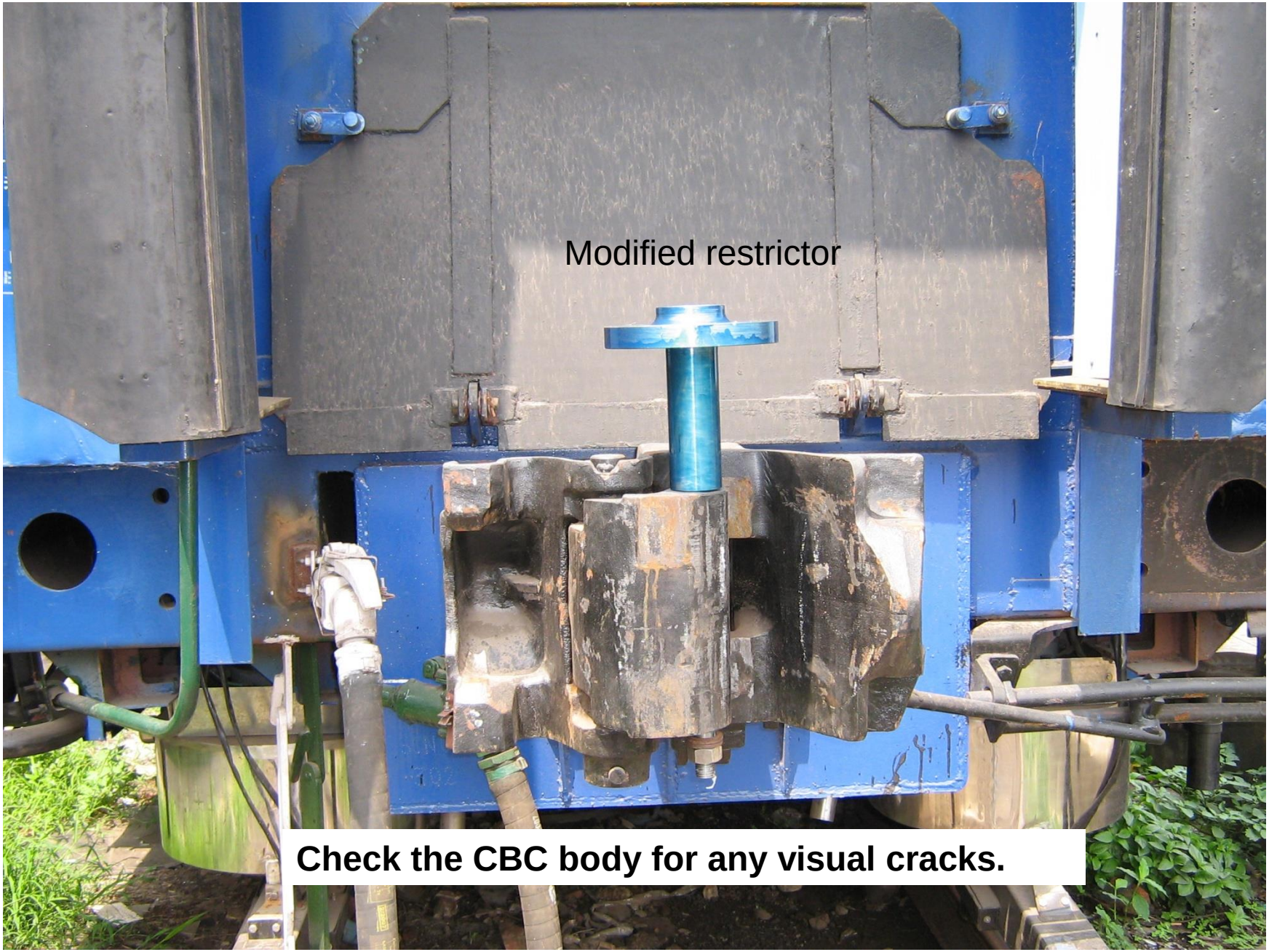
Presentation on
AAR type H–type tight lock Center buffer coupler


Anti-climbing feature of Coaching CBC, and this portion is not available at LOCO CBC. For that reason restrictor is provided in SLR to restrict uncoupling of LOCO due to vertical movement of loco CBC
Restrictor on the SLR/VPH/Power Car CBC knuckle to avoid vertical parting on run under adverse track condition
AAR type H tight lock Center buffer coupler
Check the condition of SLR knuckle, knuckle pin and lock by opening and closing the knuckle for free movement

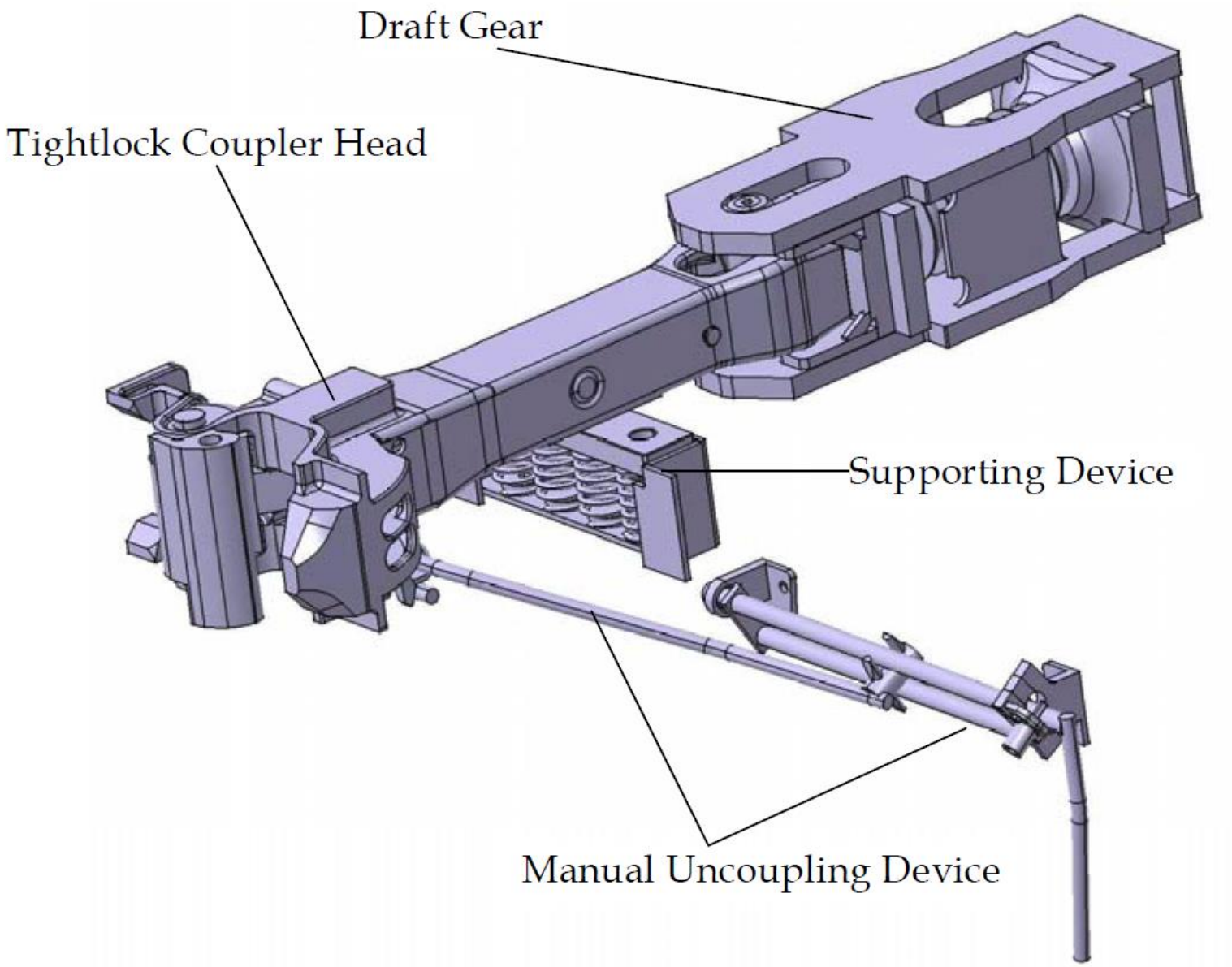


CBC height, must be from 1230 mm to 1245 mm (to be taken from rail level to top of the knuckle) knuckle height is 280 mm

Measure CBC Height of SLR/VPH (it should be 1105^{+0}_{-15} mm in empty condition)



Check the CBC body for any visual cracks.


Draft Gear
Tightlock Coupler Head
Supporting Device
Manual Uncoupling Device

Complete fitment of CBC

Ensure proper condition & functioning of CBC's manual uncoupling device and its locking arrangement (locking piece) by using female square slotted key

Use 6 mm Allen key, 13 mm D/E flat spanner for maintenance

Use 8 mm Allen key for maintenance

Locking piece

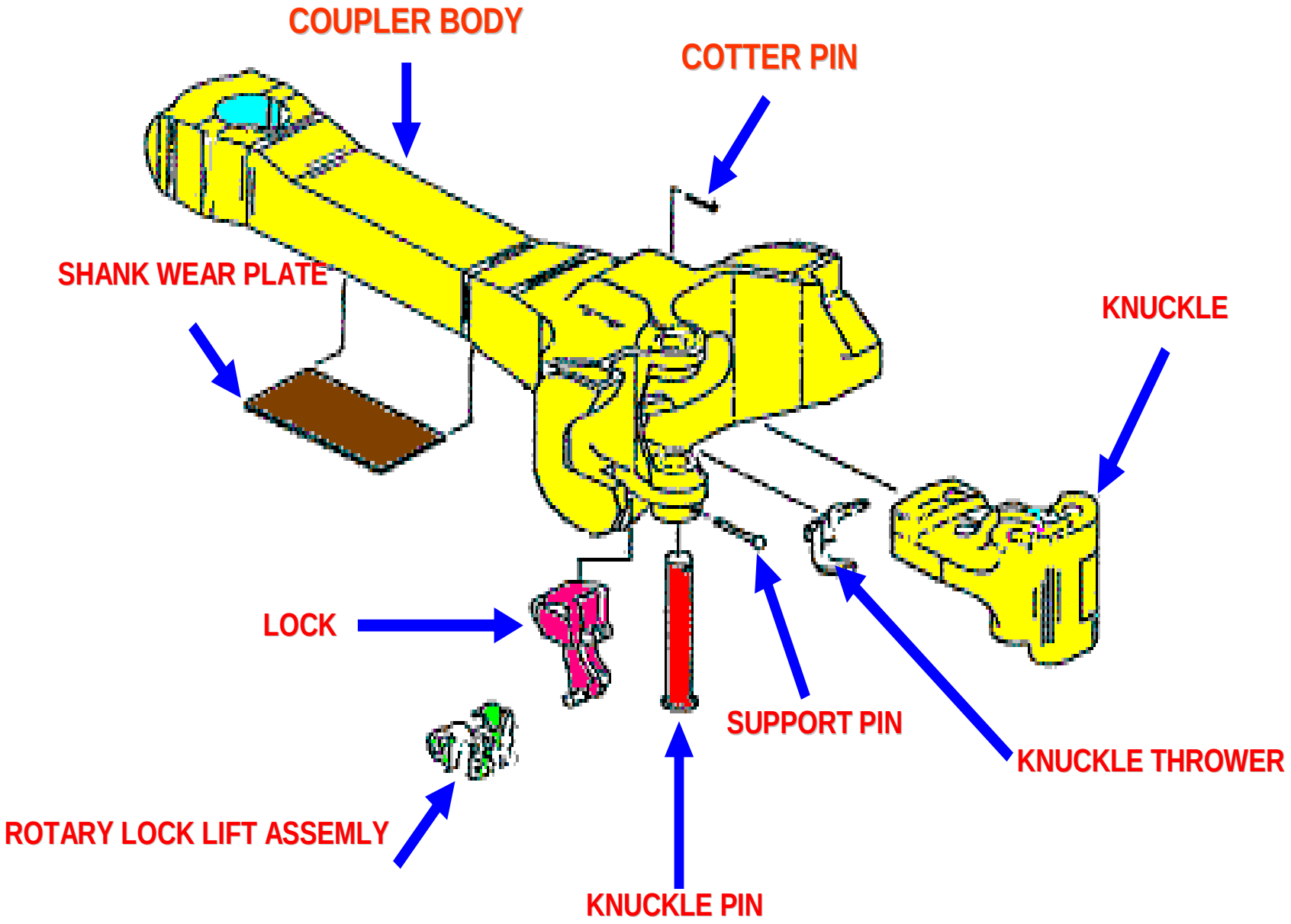
a. Tell-Tale sign. Inverted ‘V’ should be clear of obstruction

b. Rotary lever in vertical position

c. Cross pin (Diameter-18 mm) to ensure full coupling of CBC

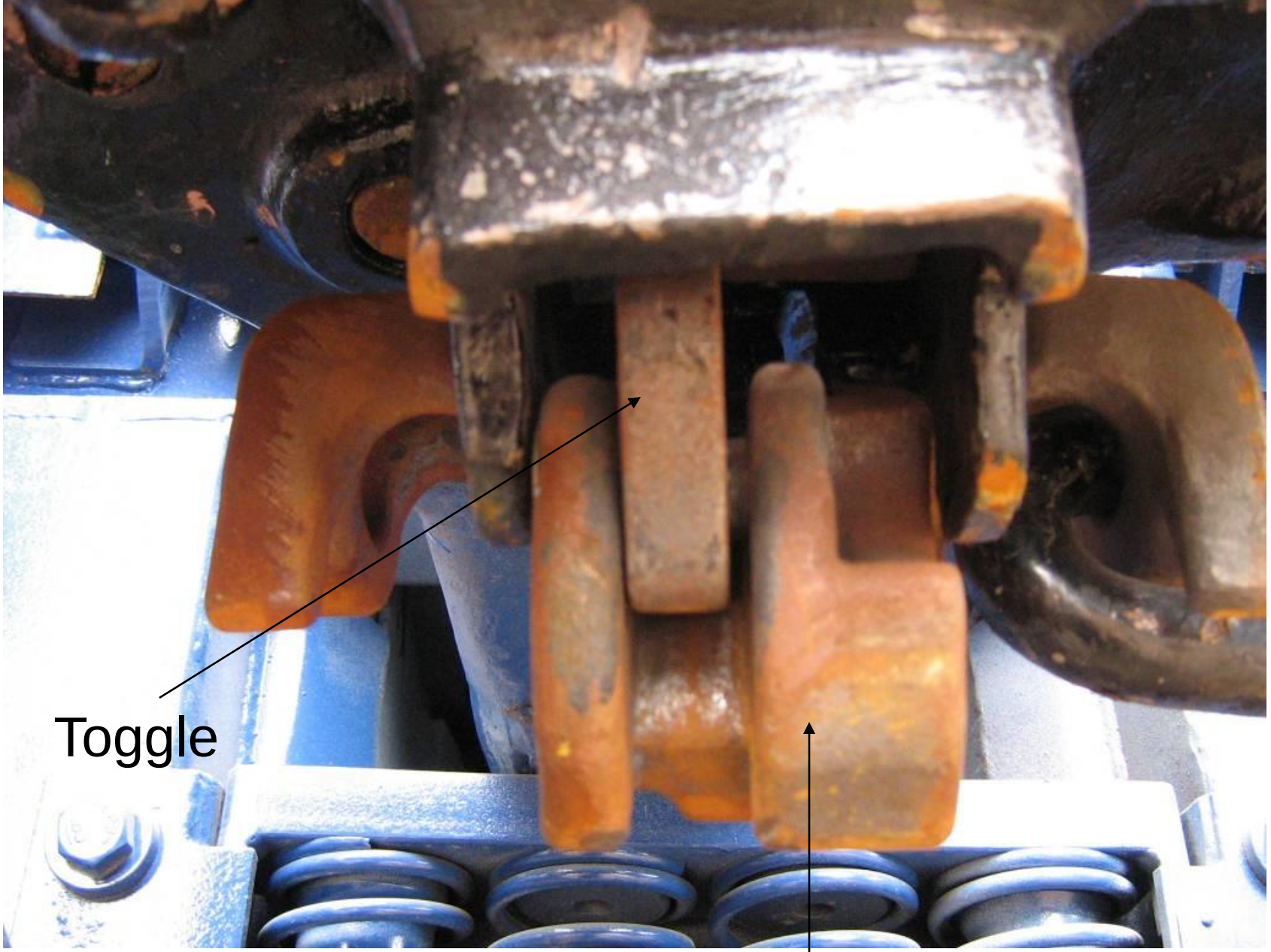
Ensure proper condition of supporting device for its securing fastenings

Key for opening of manual uncoupling device **Locking mechanism is provided for operating lever to ensure perfect locking of operating rod.**


COUPLER BODY
COTTER PIN
SHANK WEAR PLATE
KNUCKLE
LOCK
SUPPORT PIN
KNUCKLE THROWER
ROTARY LOCK LIFT ASSEMLY
KNUCKLE PIN


Knuckle Pivot Pin


Lock
Toggle



Double rotary lift assembly

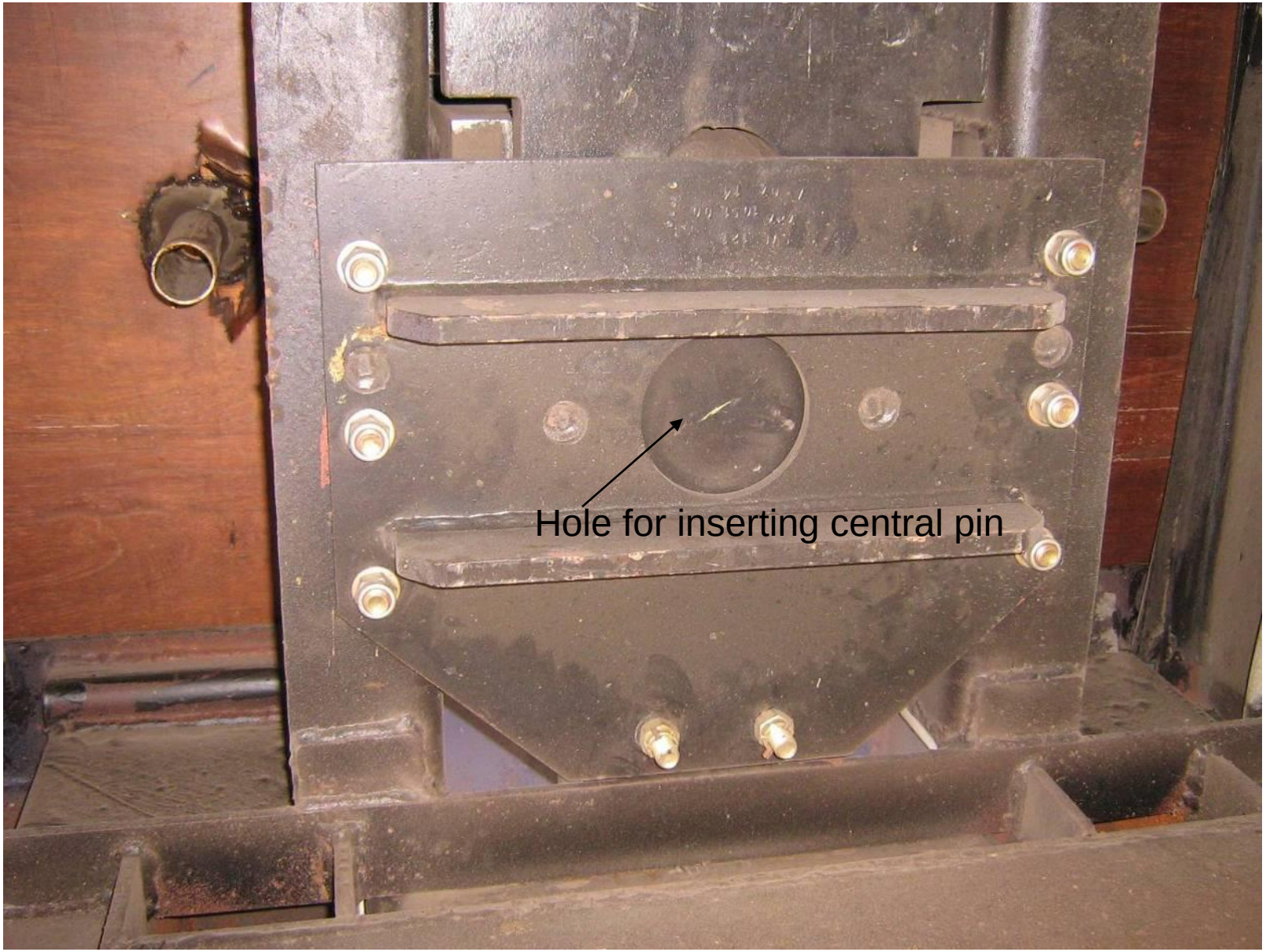
Knuckle mating surface

For changing of shim 36 mm in SLRs box spanner is required


Shim

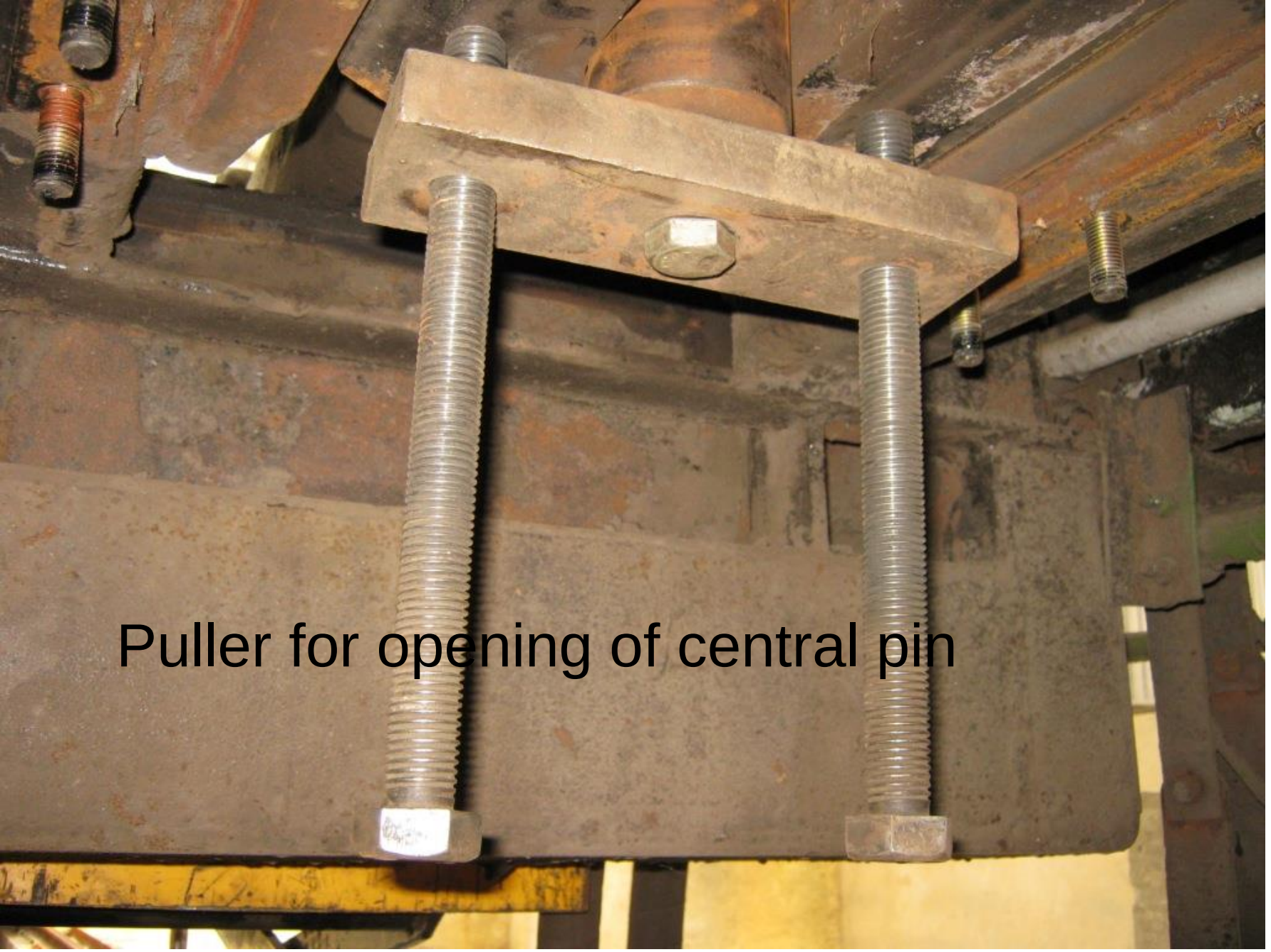

Restrictor

Escort Make Locking Piece Sub Assembly



CBC central pin supporting **base plate** and tighten with 16x50 mm nut and bolt (use 24 mm spanner)

CBC draft gear support plate and tighten with 16x50 mm nut and bolt (use 24 mm socket spanner)



Puller for opening of central pin

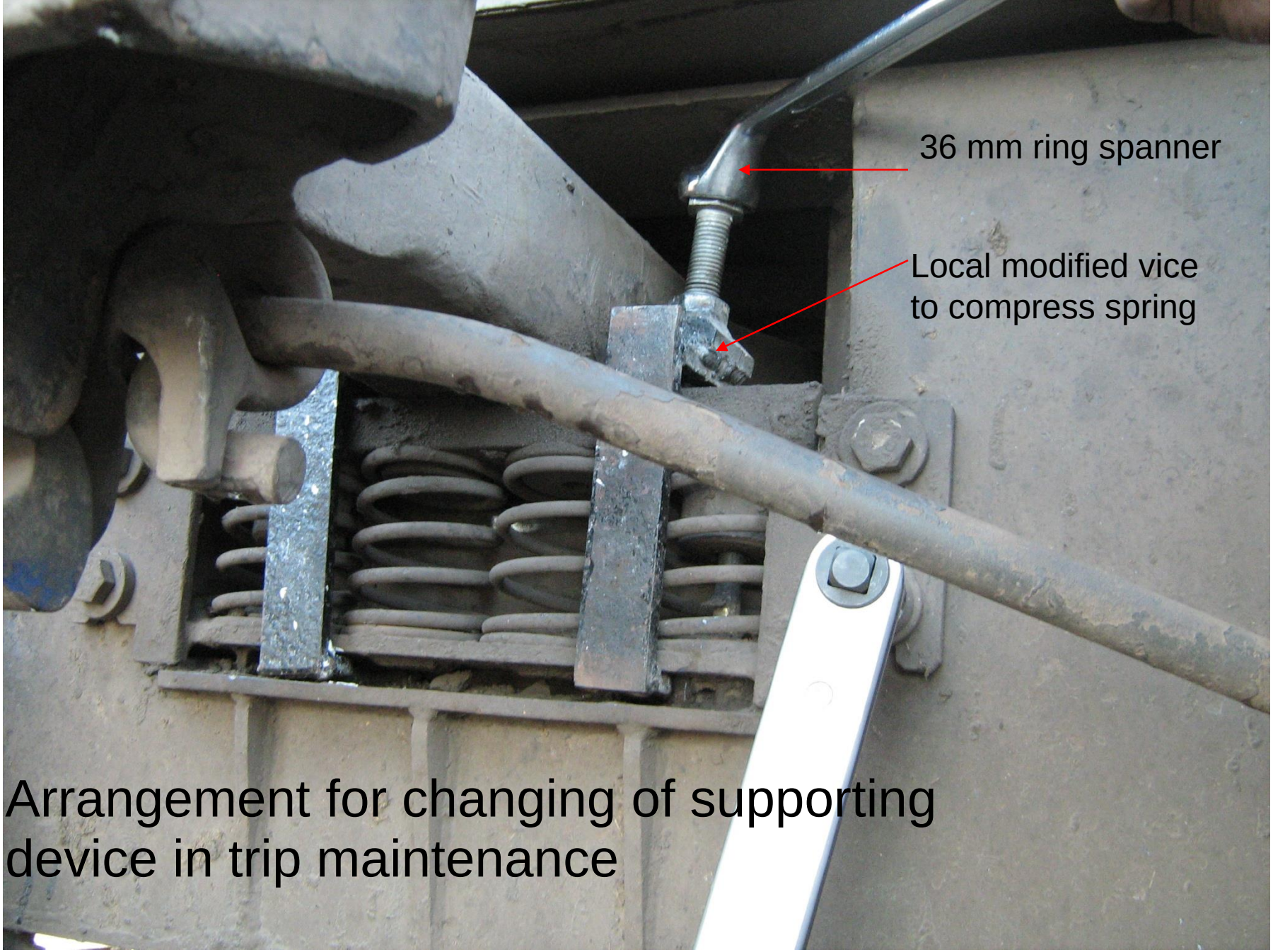
Backlash compensation device (UIC Linkage assembly)

Spring Cartridge Assy

Preloaded compression springs, FTIL make (to be checked) and special type **Allen bolt** must be checked).

14 mm allen key & 19 mm socket spanner is required for FTIL Make.

17 mm allen key & 24 mm socket spanner is required for Escort Make



Arrangement for changing of supporting device in trip maintenance

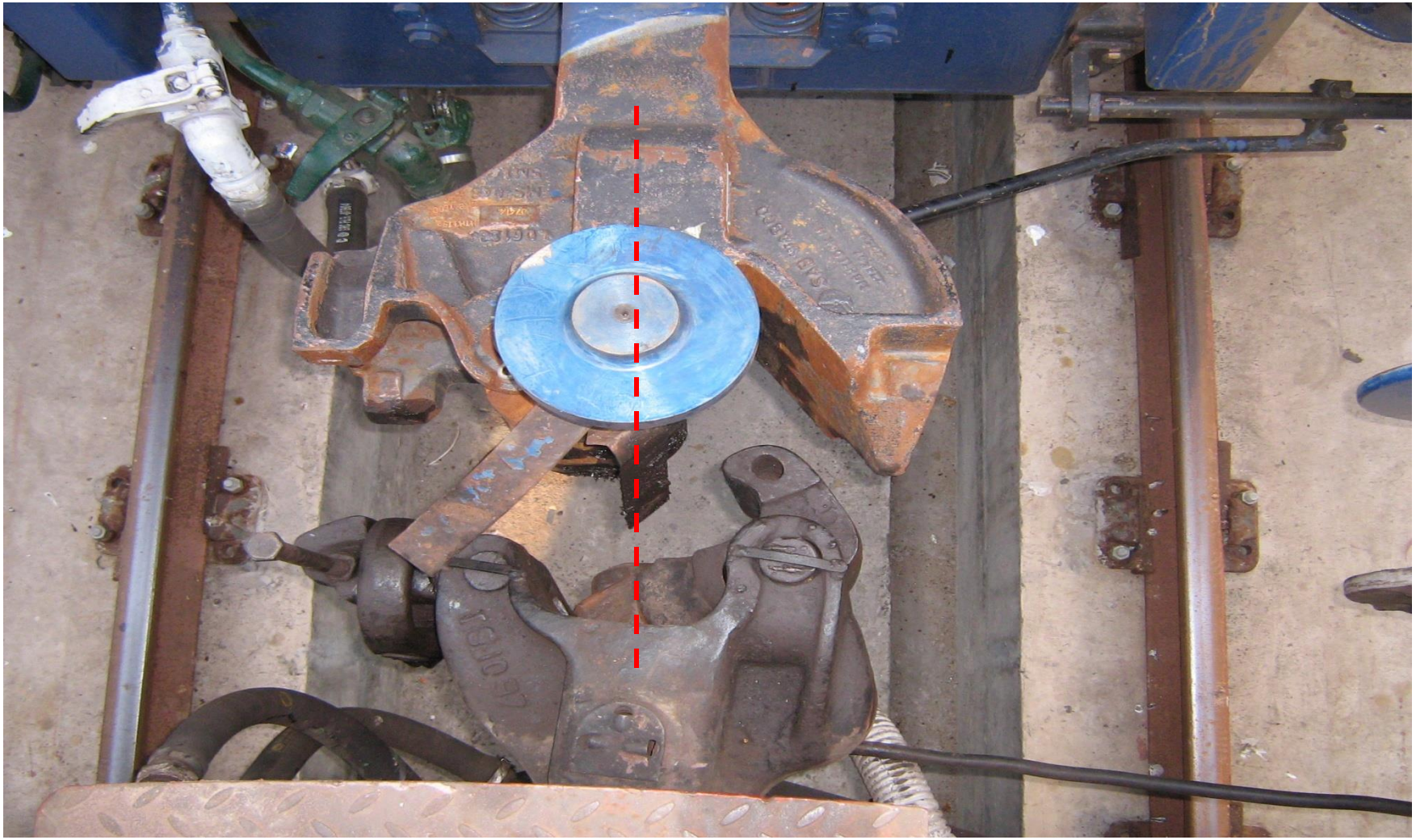
CBC supporting device to be opened by 30 mm box spanner with torque wrench (450± N-m)

Inspector Contour Gauge-I (Profile Gauge)

Gauge must pass through contour with knuckle fully closed and locked condition.

Inspector Contour Gauge-II (Jaw Gap Gauge)

Gauge must not pass and knuckle fully closed and locked condition



During coupling of CBC it must ensure position of CBC, it must be in center position and coupling of CBC should not be done in the curvature of track

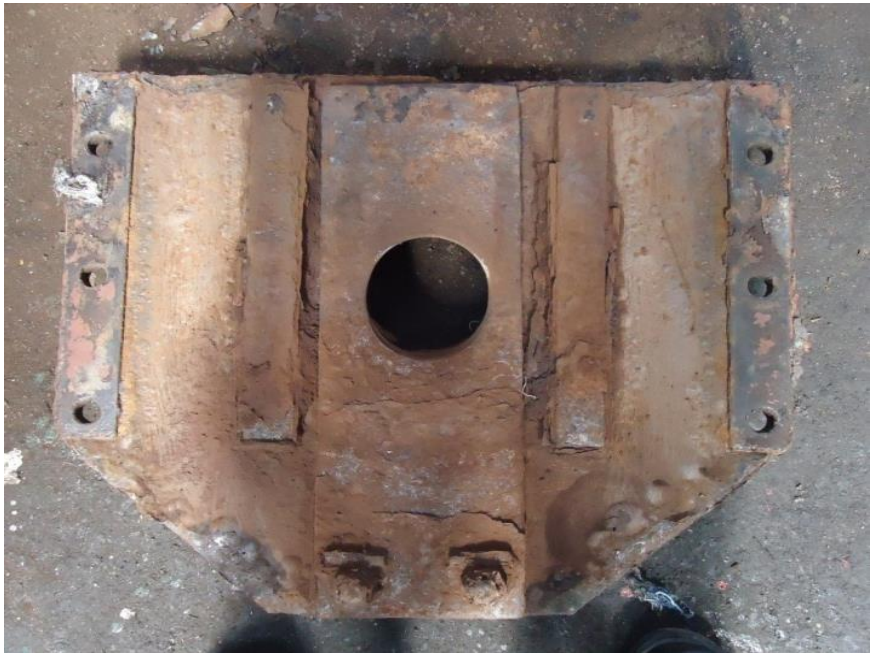
Difference of height between CBC’s more than 75 mm is not allowed

Don’ts

Do not apply grease on parts like lock, lock lift assembly, and knuckle.

Do not hammer lock lift assembly.

Do not tie rotary lever and operating lever hook with binding wire.



CBC Central pin base plate along with axial stiffner plate punctured

Central pin base plate and axial stiffener plate shown separately. The punctured hole on axial stiffener plate matching with existing hole on base plate allowing central pin to drop down wards causing coupler body to come out and parting.

Parting took place towards CEN end of the coach where the axial stiffener plate fully punctured and a hole formed. The axial stiffener plate on VSKP end of the coach also removed for inspection. It may be seen that the development of hole is in the formative stage due to rubbing and hitting of yoke pin which is a potential case for parting.

The silent block bush of coupler body CEN end of coach rubber bonding is completely given up due to which sleeve worked out as shown above.

The silent block of coupler body VSKP end also given up partially as shown above.