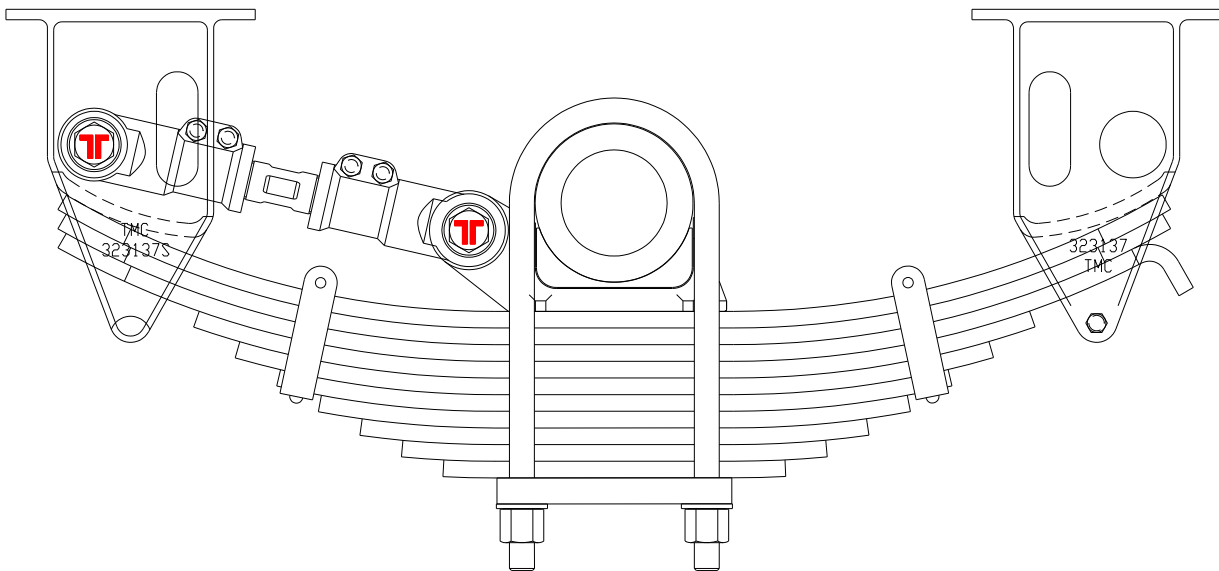




TMC Australia Pty Ltd

TMC 75 Spring Suspension # 332109 Service Manual

TMC 75 HD SPRING SUSPENSION # 332109 SERVICE MANUAL



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TMC Australia's policy is one of continuous development, we therefore reserve the right to change or modify the specifications without notification.

We Engineer Quality and Performance



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RECOMMENDED SERVICE SCHEDULE.

First Service 500 km or on Delivery:

Check all torque settings and re torque.

Every 10,000km:

Check all torque settings and inspect for visual damage and wear.

Repair and replace parts as necessary.

Every 50,000 km or Annually:

Check all torque settings and inspect for visual damage and wear.

Check all suspension bushings for wear and deterioration replace or repair as necessary.

Check all leaf springs and U bolts for wear and deterioration, replace or repair as necessary.

Carry out a visual inspection of the suspension for wear and damage, repair or replace any worn or damaged parts as necessary.

Check the axle alignment and realign as necessary. Axle alignment must be checked when ever severe kerb contact, accident damage or the torque arm bushes are replaced.

Note: TMC's range of heavy duty spring suspensions and heavy duty trailer axle combinations are designed for operating on both paved roads and graded gravel / dirt roads. For equipment that is regularly used "off-road" or "off-highway" and considered severe operation, then TMC recommends that service intervals should be halved. In extremely severe operating conditions (ie corrugated roads), weekly and in certain cases even daily inspections of the equipment may be required to ensure safe and correct operation of the suspension and axle combination.

TORQUE ARMS and TORQUE ARM BUSHES – ASSEMBLY.

During servicing work the dismantling and re assembly of the adjustable torque arms may be necessary when replacing parts. The following is the recommended procedure. Assemble the adjustable torque arm to the same length as the matching fixed length torque arms. It is recommended that the fixed length torque arms are fitted on the near side (kerb) of the trailer and the adjustable torque arms are fitted on the off side of the trailer.

Fit the end of the torque arm into the suspension hanger or axle seat casting; lube the tapered poly torque arm bushes with soapy water (50% soap/50% water) and insert from either side. Fit the torque arm pin through the bushes, fit the torque arm washer and lock nut onto the end of the torque arm pin. Check that the torque arms are located centrally in the end of the hanger or axle seat and tighten the torque arm pin nut.

Assembly torque.

Torque arm pins: 1"UNF & M24 nut - 200/250 Nm. (Poly bush).

Assembly Notes:

1. On all underslung suspensions the adjustable torque arms are to be fitted with the clamp bolts to the top as shown on the assembly drawings.
2. On installation lubricate the poly torque arm bushes with 50% dish soap/50% water only.



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AXLE ALIGNMENT and ADJUSTMENT PROCEDURE.

Measure from the centre of the kingpin to a centre point on each end of the front trailer axle, adjust as needed the adjustable torque arms length to get the two dimensions equal.

It is possible also to do the axle alignment using a laser or optical aligning device designed for axle alignment.

After the axle alignment is completed and re checked, tighten the adjustable torque arm clamp bolts.

Assembly torque.

Torque arm clamp bolts: ½”UNF nut - 130/140 Nm.
 M14 nut - 140/150 Nm.

After or during when service work or repairs are being done on the suspension or any of its components a visual inspection of the suspension should be carried out to ensure that all components are correctly located and fitted. The incorrect fitment and installation of any components will greatly reduce the service life of the suspension and its components.

GENERAL WELDING and REPAIR NOTES.

All welding between the suspension hangers and the trailer frame is to be done using either low hydrogen electrodes or an approved equivalent MIG process. If a suspension hanger must be replaced during repair or service work, weld as follows.

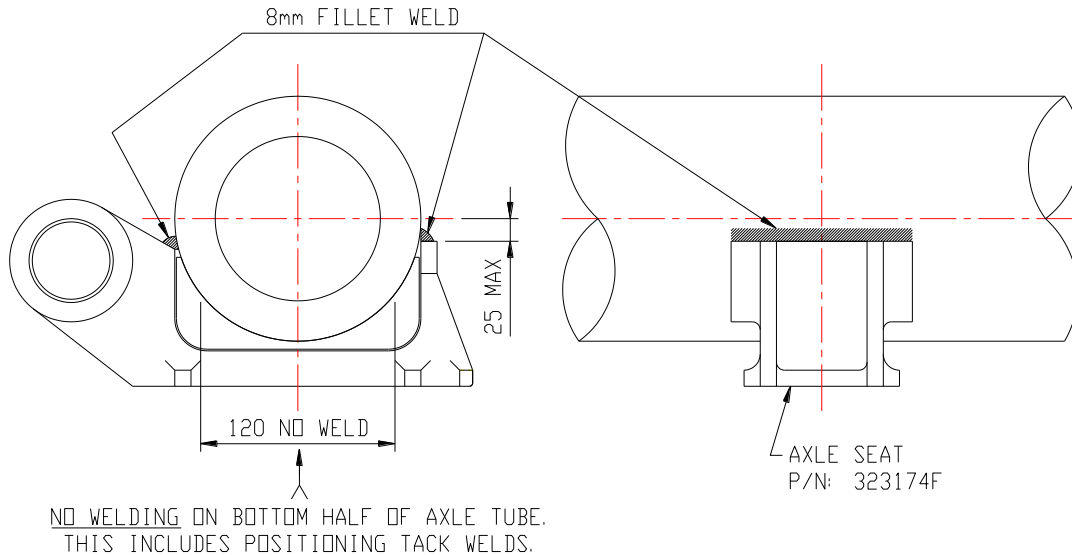
Weld all around the top of each suspension hanger in 10mm continuous fillet weld.

After installation of the suspension hanger it is recommended that either the pipe or channel type cross bracing which was fitted is replaced and re welded to the new hanger. Fully weld around the ends of the cross bracing to each suspension hanger.

When replacing axle seats be sure to re weld the axle seat as follows.

Weld each axle seat in position using 8mm continuous fillet weld. The Axle manufacturer should be consulted with reference to welding technique and settings.

Do not weld circumferentially around the axle and restrict all welding to within 25mm of the axles front and rear horizontal centre line.

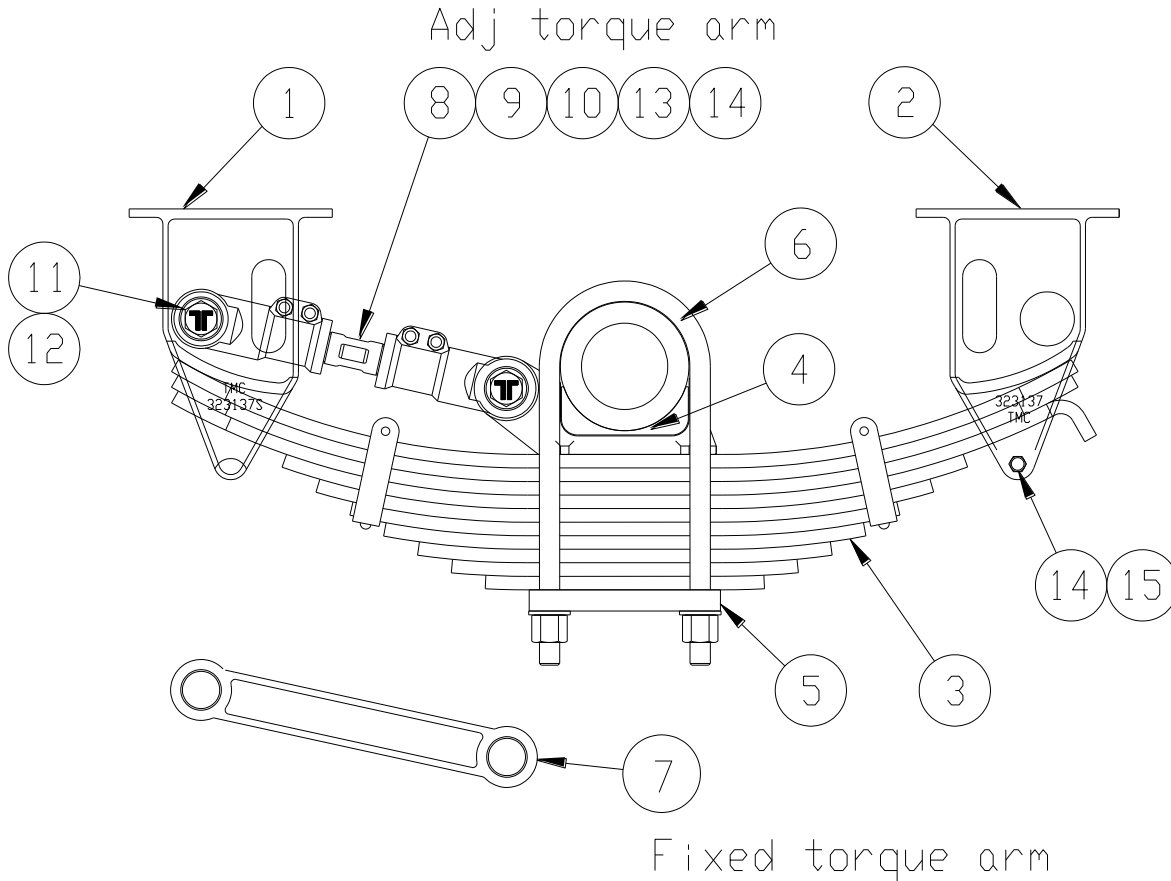
UNDERSLUNG SUSPENSION**TORQUE SETTINGS CHART**

U Bolts:	- 750/800 Nm. (1" UNF & M24)
Torque Arm Pin Locknut:	- 200/250 Nm. (1" UNF & M24) poly bushes.
Adjustable Torque Arm Bolts:	- 130/140 Nm. (1/2" UNF Grade 8) - 140/150 Nm. (M14 Grade 8)
Rear Hanger Bolts:	- 75/85 Nm. (M12 Grade 8)

(Note: 1 Nm = 0.74 ft.lbs. approximately)

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TMC 75 Underslung Spring Suspension Spare Parts Listing:



Item	Part No.	Description
1.	323137	Front hanger
2.	323167	Rear hanger
3.	323111	10 leaf heavy duty spring - 75x16
4.	323174F	Axle seat 152 rnd x 25 high
5.	323164	Clamp plate heavy duty 152 dia axle
6.	323157/430	U bolt – 152 dia x 430 x 1” (incl nuts and washers)
7.	323100/370	Fixed torque arm – 370
8.	323124L #	Adj torque arm end – LH
9.	323124R #	Adj torque arm end – RH
10.	323133/01 #	Adj torque arm screw – 260
11.	323131	Torque arm pin assembly
12.	323128PB	Torque arm bush – poly
13.	9HB1/2UNF2.00	Hex bolt ½”UNF x 2” long
	9HB14150050 #	Hex bolt M14 x 50 long
14.	9LN1/2UNF	Nyloc nut ½” unf
	9LNM14 #	Nyloc nut M14
15.	9HB1/2UNF5.00	Hex bolt ½”UNF x 5” long

Note: Parts marked with # can be supplied as adjustable torque arm assembly P/N: 323300/01