

# INSTALLATION, MAINTENANCE & SERVICE DOCUMENT

## KPG50-XX KING PIN Bolt-in

### INSTALLATION

Installation and Maintenance procedure shall be strictly in accordance with statutory requirements by regulatory authorities.

**Note:** All Welds shall be subject to process control. Preheat the welding areas to 200° to 300° Celsius. Use low Hydrogen Techniques and where necessary post weld treatment. Only qualified welders and trades people should perform the welding & assembly tasks.

### Bolt-in

Ensure retention plate corresponds with the skid plate thickness. This can be found on top of the retention plate.

KPG **08** Used with 8mm skid plate.

KPG **10** Used with 10mm skid plate.

KPG **12** Used with 12mm skid plate.

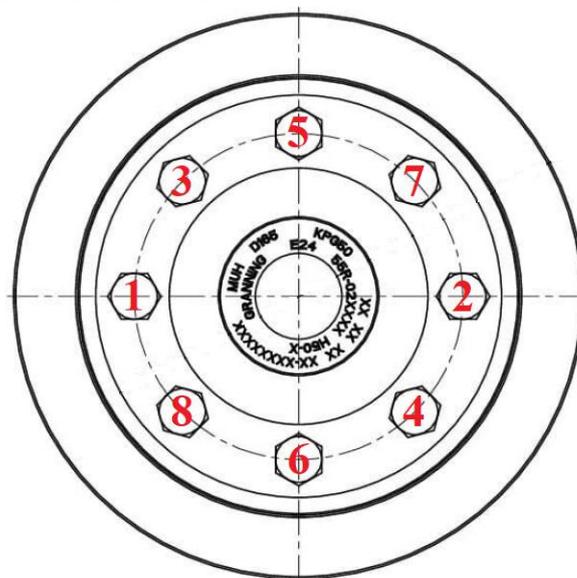


Only use genuine retaining bolts.

Install M14 Grade 10.9 and torque to **190-220 Nm** after the welds are cool.

Tighten and torque the bolts in sequence as shown below.

The 50mm king pin uses the **Hex head bolt** (KPE50-01)



#### Group Companies

**G.B.**

Granning UK - WA1 4SZ  
J4 Truck Components - SS13 IEB  
Euro Truck & Trailer - WA1 4SZ  
Sewell Caliper Centre - LS11 9SU

**N.I.**

Granning Lynx / J4 (NI) - BT15 3HB  
North Belfast Springs - BT15 3HB  
Batyre Ltd - BT15 3HB  
ICA / BrakeTech - BT15 3HB

**R.O.I.**

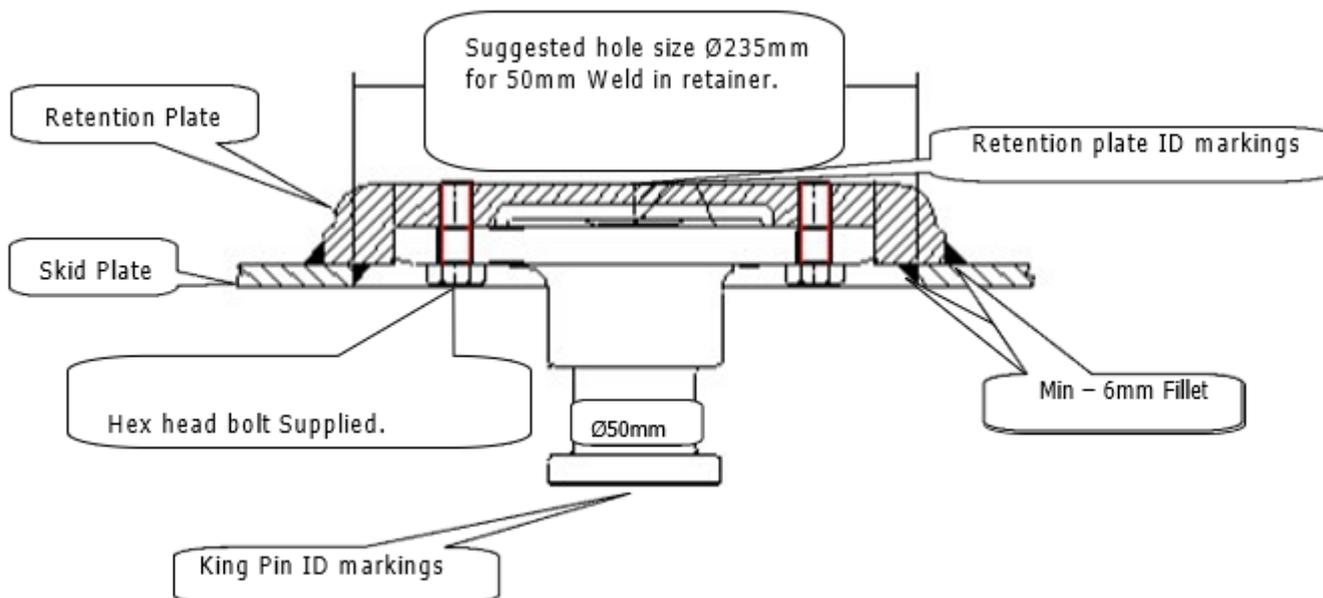
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**Welding to vehicle**

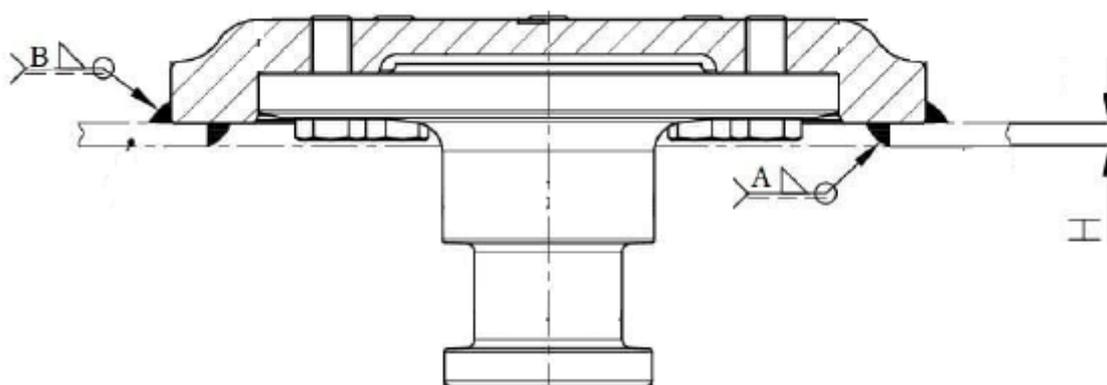
All standard workshop and HSE regulations for Securing the vehicle should be adhered to  
Welding must be performed by a suitably trained and qualified authorised personnel.  
The required welding seam quality must comply with DIN EN ISO 5817-B.  
The Pins or receiving part of retainer plate protected against any weld splatter during installation process.

Weld to inside and outside of the retention plate as per Fig C and FIG D below

**Fig C** (Std 50mm)



**FIG D** (Weld size)



Model No:	Skid Plate Thickness H	Fillet weld A	Fillet weld B
KPG50-08	8mm	6mm	6mm
KPG50-10	10mm	7mm	7mm
KPG50-12	12mm	8mm	8mm

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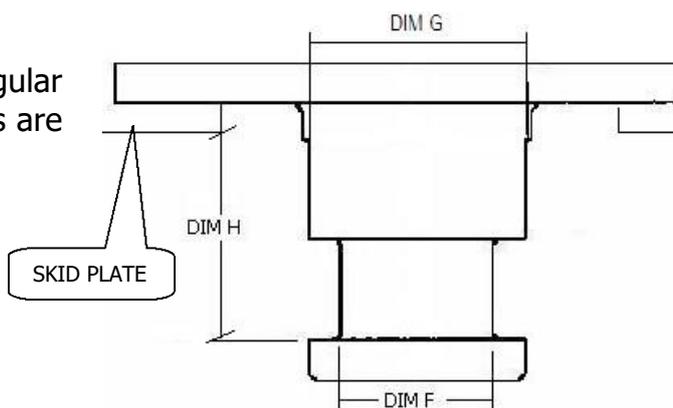
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## WEAR LIMITS

King pin dimensions should be checked at regular intervals and should be replaced if wear limits are exceeded.

Wear Gauges for simple checking



King Pin Size	Dimensions	Standard	Wear Limits
50mm	F	50.80 ± 0.1 mm	49 mm minimum
	G	73.00 ± 0.1 mm	71 mm minimum
	H	69.5 ± 1.5 mm	73 mm maximum

## MAINTENANCE

- Inspect king pin and skid plate when completing the monthly turntable service
- Check for damage, wear and cracks.
- After installing a new king pin, check retaining bolt torque again after 10,000km.
- Check retaining bolt torque every 6 months or 50,000km (This is a guide only, frequency does depend on the application).

**Note:** If excessive wear is detected on the king pin (check wear limits) or the skid plate is scored it is probable that the turntable jaws and top plate on the turntable will bear corresponding wear/scoring. Repair or replace the items as necessary to maintain the integrity of the turntable connection and stay within the allowable wear limits.

**Note:** Re-machining of King Pins or 'building-up' of King Pins by welding to achieve or restore required dimensions is **NOT** an acceptable practice.

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## Check the Kingpin!

Check your kingpin regularly.

Please consider the application, km's travelled, the number of coupling and un-coupling operations and how these actions are performed by various operators, any incidents which may have caused any excessive loads on the king pin?

Using Wear Gauge will make checking the kingpin for wear and tear easy.

NO-GO gauge: The kingpin MUST be replaced if indicated diameter enters the gauge slot.



Is the Kingpin still squarely installed?

Are there signs of damage to the kingpin?

Are there any impact signs?

Checked the mounting bolts?

Will this kingpin last to the next check?



**If there is the slightest doubt – replace the kingpin!**

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