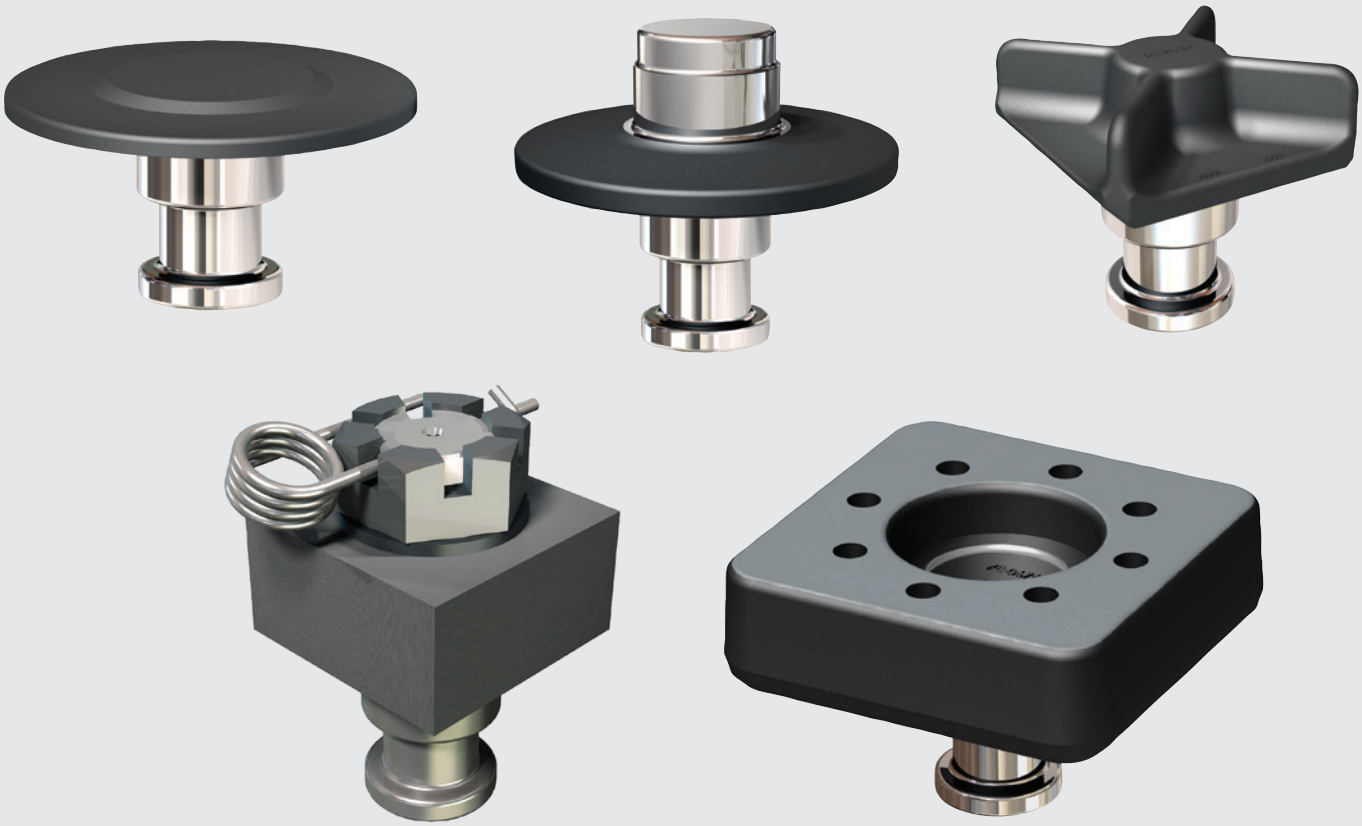


KINGPINS

HOLLAND KINGPINS MEET OR EXCEED INDUSTRY STANDARDS FOR QUALITY AND PRECISION

KINGPINS

The importance of a "safe" connection

Your fifth wheel and kingpin are two of the most important components on your trucks. That connection is the heart of your operation, and you need to know that it will be safe, reliable and consistent every time you hit the road. Since the 1930s, HOLLAND couplings have been designed and manufactured to be the industry's most innovative, safe and high quality tractor-trailer connection components, utilizing a precisely integrated "systems" approach that ensures that every HOLLAND kingpin will perform the right way, every time.

"Raising the bar" on kingpin performance standards

All HOLLAND kingpins must meet or exceed industry standards that define the boundries of kingpin design, manufacture and use. The SAF-HOLLAND Performance Advantage continues to set the standard and "raise the bar," making HOLLAND kingpins the first choice of OEMs and fleets that are serious about trucking.

Precise metallurgy

HOLLAND kingpin performance is determined by carefully controlled metallurgical composition—as well as by shape and heat treatment—all tightly controlled throughout our manufacturing process. That is why SAF-HOLLAND specifies low alloy steels with balanced chemistry to provide the best combination of machinability, cost and heat-treatability with excellent strength, hardness, and impact resistant characteristics. All HOLLAND kingpins contain relatively high nickel and low carbon composition to ensure the best balance of properties.

Carefully-controlled manufacturing

At SAF-HOLLAND, we take quality control seriously. From the making of the steel to forging to delivery, SAF-HOLLAND tracks every aspect of manufacturing for every kingpin we make. All HOLLAND kingpins are manufactured following our three-step process:

– Precision steel specifications

Because the final forging can never be "cleaner" than the original steel, SAF-HOLLAND requires a specific level of cleanliness and chemical composition at the mill. The steel we use must consistently meet those standards, or we won't use it.

– Carefully monitored forging

The forging process is carefully specified and continually monitored. Before each forging is released, we conduct demanding dimensional control, magnetic particle and macro-etch tests to make certain surface conditions and grain flow meet our specifications.

– Precision, quality manufacturing

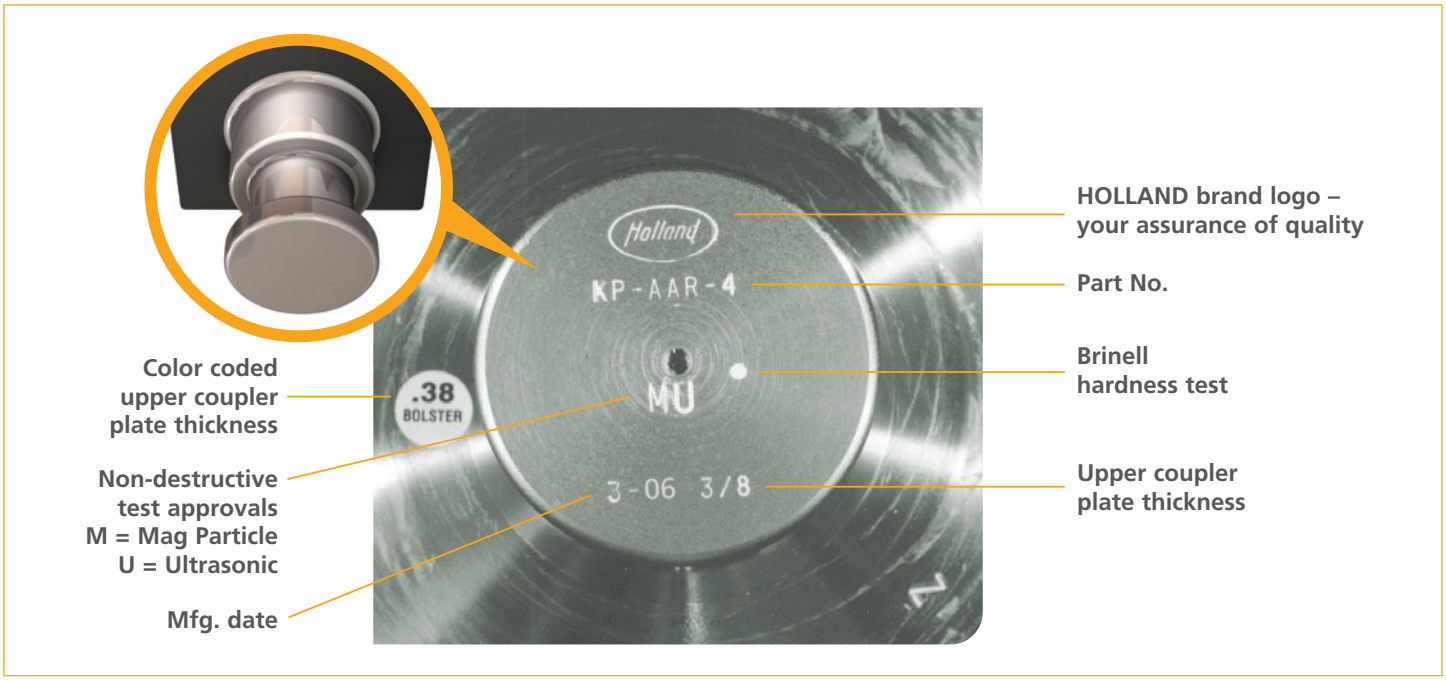
All forgings are carefully inspected prior to machining and then again at several stages throughout the manufacturing process. All HOLLAND kingpins must meet rigid SPC requirements in the machining process to ensure tight dimensional tolerance and consistency. All are carefully monitored in the heat treatment process to provide process uniformity and optimum structural integrity.

Kingpin Control Procedure	
Production at Steel Mill	Chemistry, Steel Cleanliness
Forged Steel	Dimensional Shape, Grain Flow
Receiving Inspection	Grain Flow, Surface Cleanliness, Dimensions, Metallurgy
Manufacture of Kingpin	Dimensional Tolerance, Heat Treatment
Testing	Brinell, Magnetic Particle, Ultrasonic, Dimensional

DEMANDING TESTING

Because our customers depend on HOLLAND kingpins to keep their equipment on the road, our testing process is the most comprehensive and demanding in the world. Every HOLLAND kingpin must pass three major non-destructive test inspections prior to final SAF-HOLLAND approval.

- **100% Brinell hardness test**
  Verifies the hardness level to a required depth within a defined hardness range.
- **100% magnetic particle test**
  Confirms surface cleanliness and freedom from surface defects.
- **100% ultrasonic tests**
  Ensures the integrity of the kingpin below the surface.



The value of HOLLAND kingpin technology

Trust takes years to earn, and minutes to lose. SAF-HOLLAND accepts the responsibility to engineer and manufacture kingpins that earn the trust of every customer.

The fact is, over 3.5 million HOLLAND kingpins have been manufactured in over 70 years.

Simply, HOLLAND kingpins perform day in, day out, because they are made only one way. The right way.

THE HOLLAND ADVANTAGE

All HOLLAND Kingpins Deliver:

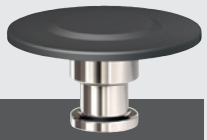
High impact resistance
Proper alloy selection and heat treatment provide the best balance of hardness and impact resistance without brittleness, even at low temperatures.

Maximum wear resistance
Through proper alloy selection and a carefully controlled hardening process, HOLLAND kingpins provide exceptional wear for years of dependable service.

Optimum strength and fatigue resistance
Ultimate strength and yield characteristics meet all SAE and TTMA performance requirements.

Ease of installation
The alloys SAF-HOLLAND uses offer excellent welding characteristics for easy installation or replacement.

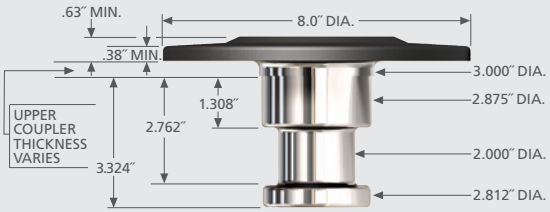
Mushroom Series



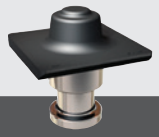
2″ SAE KINGPINS

MODEL	STEEL ALLOY	BRINELL HARDNESS	UPPER COUPLER THICKNESS	HOLES
KP-T-809-CF	8630H	302-363	.25″	No
KP-T-809-EF	8630H	302-363	.31″	No
KP-T-809-F	8630H	302-363	.38″	No
KP-T-809-BF	8630H	302-363	.50″	No
KP-T-809-GF	8630H	302-363	.75″	No
KP-T-809-C	8630H	302-363	.25″	8 equally spaced .53″ holes on 6.75″ diameter for plug welding
KP-T-809-E*	8630H	302-363	.31″	
KP-T-809	8630H	302-363	.38″	
KP-T-809-B	8630H	302-363	.50″	
KP-T-809-A	8630H	302-363	.63″	
KP-T-809-G*	8630H	302-363	.75″	

*Special - available for quote.



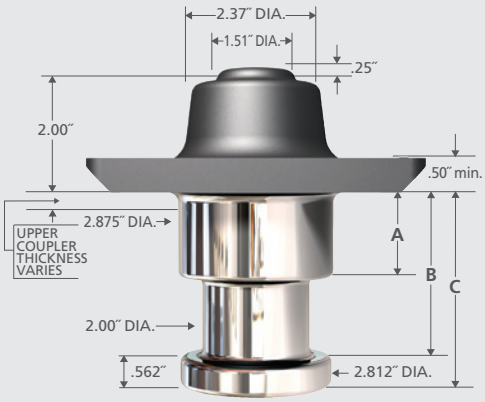
‘L’ Series



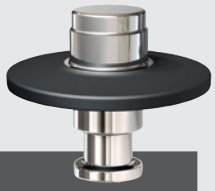
2″ SAE KINGPINS

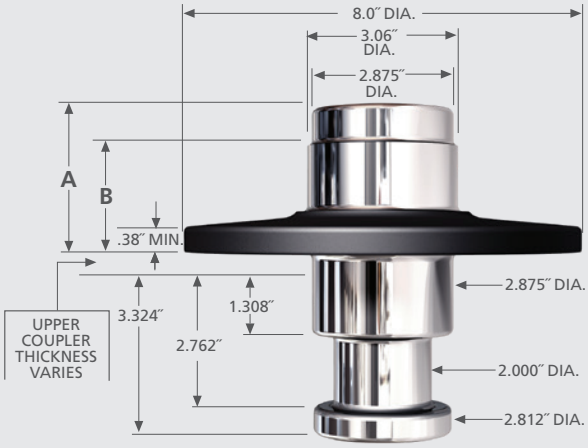
MODEL	STEEL ALLOY	BRINELL HARDNESS	UPPER COUPLER THICKNESS	DIMENSIONS A	B	C
KP-AAR-L*	4320H or 4718H	380-420	.38″	1.683″	3.137″	3.699″
KP-AAR-L-C	4320H or 4718H	380-420	.25″	1.558″	3.012″	3.574″
KP-AAR-L-E	4320H or 4718H	380-420	.31″	1.620″	3.074″	3.636″

*Special - available for quote.



Double Spool Series

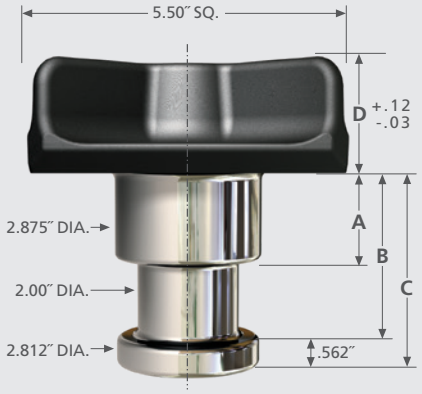


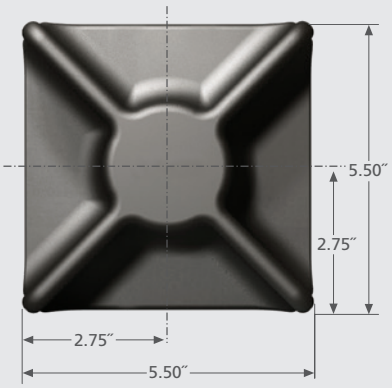


2″ SAE KINGPINS					
MODEL	STEEL ALLOY	BRINELL HARDNESS (BHN)	UPPER COUPLER THICKNESS	DIMENSIONS A	B
KP-T-880-C	8630H	302-363	.25″	2.88″	2.12″
KP-T-880-E*	8630H	302-363	.31″	2.88″	2.12″
KP-T-880	8630H	302-363	.38″	2.88″	2.12″
KP-T-880-B	8630H	302-363	.50″	2.88″	2.12″
KP-T-880-1-C	8630H	302-363	.25″	2.00″	1.50″
KP-T-880-1-E*	8630H	302-363	.31″	2.00″	1.50″
KP-T-880-1*	8630H	302-363	.38″	2.00″	1.50″
KP-T-880-1-B*	8630H	302-363	.50″	2.00″	1.50″

*Special - available for quote.

Cruciform Series





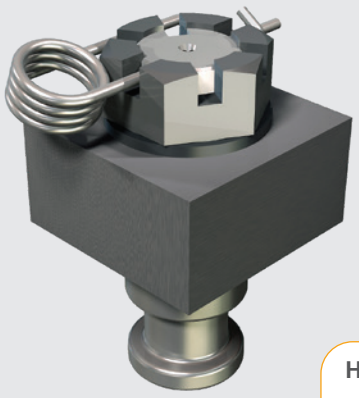
2″ SAE KINGPINS							
MODEL	STEEL ALLOY	BRINELL HARDNESS (BHN)	UPPER COUPLER THICKNESS	DIMENSIONS A	B	C	D
KP-AAR-3	4718H or 4320H	380-420	.38″	1.683″	3.137″	3.699″	1.937″
KP-AAR-3-C	4718H or 4320H	380-420	.25″	1.558″	3.012″	3.574″	1.937″
KP-AAR-3-E	4718H or 4320H	380-420	.31″	1.620″	3.074″	3.636″	1.937″
KP-AAR-4	4718H or 4320H	380-420	.38″	1.683″	3.137″	3.699″	3.625″
KP-AAR-4-C	4718H or 4320H	380-420	.25″	1.558″	3.012″	3.574″	3.625″
KP-AAR-5	4718H or 4320H	380-420	.38″	1.683″	3.137″	3.699″	2.437″
KP-AAR-5-C	4718H or 4320H	380-420	.25″	1.558″	3.012″	3.574″	2.437″
KP-AAR-5-E	4718H or 4320H	380-420	.31″	1.620″	3.074″	3.636″	2.437″

Removable Series

2″ & 3.5″ SAE KINGPINS KITS

KINGPIN KIT PART NO.*	SIZE
KP-0446	2″ for 5″ Sq. Bolster
KP-0447	2″ for 6″ Sq. Bolster
KP-0448	3.5″ for 6″ Sq. Bolster

* Kingpin Steel Alloy 4140

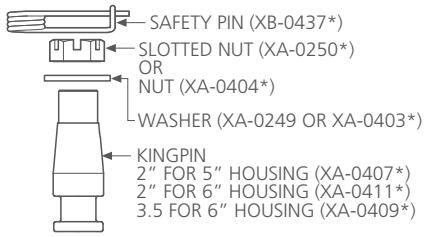


SAE KINGPIN HOUSINGS

HOUSING PART NO.**	BOLSTER PLATE THICKNESS	HOUSING SIZE
KP-0438	.25″	5″
KP-0440	.38″	5″
KP-0441	.50″	5″
KP-0445	.50″	6″

** Housing Steel Alloy 1018

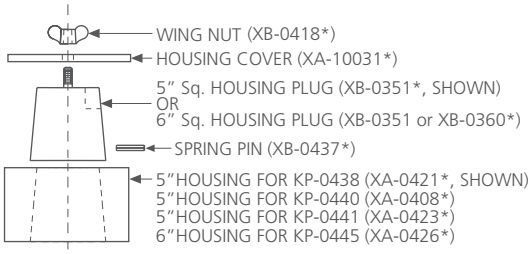
Kingpin Kits



* Not for Individual Sale.

NOTE: Kingpin kits and housings are sold separately.

Housing Plugs



* Not for Individual Sale.

HOLLAND Removable Series

2″ and 3.5″ SAE Kingpin Installations

Applications

- **Repositionable Kingpins**
  - Switch between 2-position kingpin settings on trailer to accommodate swing clearances.
- **Interchangeable Kingpins**
  - Switch between 2″ and 3.5″ kingpins with 6″ housing to accommodate fifth wheels.

Features

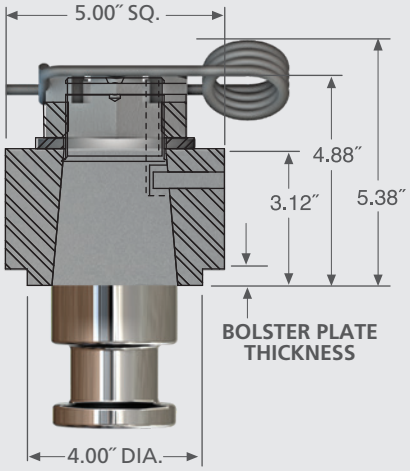
- 5″ weld-in housing for 2″ kingpin applications.
  - .25″ / .38″ / .50″ bolster plate thicknesses are designed into the housing.
- 6″ weld-in housing for interchangeable 2″ and 3.5″ kingpins.
  - .50″ bolster plate thicknesses are designed into housing.
- Close tolerance, tapered engagement between housing and kingpin for a firm, secure installation.
- Dowel pin, mounted in housing, holds kingpin in place during installation and removal, and prevents kingpin rotation.
- When kingpin is removed, plugs are available to protect housing from dirt and debris.

Quality

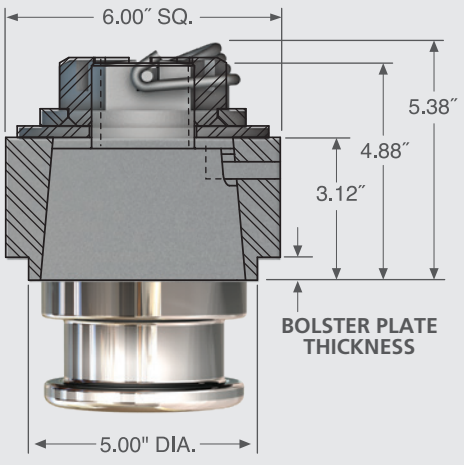
- Kingpins are manufactured from AISI 4140 alloy steel, quenched and tempered for wear resistance and strength, hardened to 269-302 BHN.
- Kingpins are 100% Brinell hardness tested, magnetic particle tested, and ultrasound tested.

For additional specification detail, refer to document XL-KP103.

DIMENSIONAL VIEWS

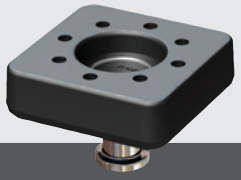


SAE 2.00″ KINGPIN



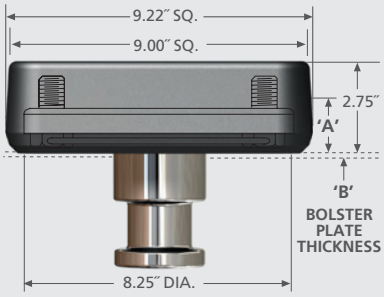
SAE 3.50″ KINGPIN

Replaceable Series

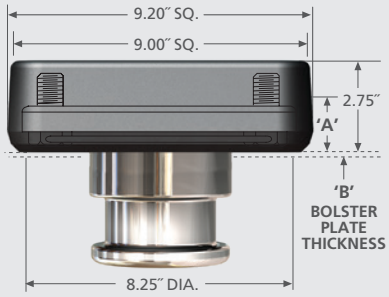


2″ & 3.5″ SAE KINGPINS

PART NO.	BOLSTER PLATE 'B'	KINGPIN SIZE	STEEL ALLOY		KINGPIN BRINELL HARDNESS (BHN)	COUNTER BORE 'A'
			KINGPIN	HOUSING		
KP-0880	.25″	2″	8630H	4130H	302-363	1.56″
KP-0881	.31″	2″	8630H	4130H	302-363	1.50″
KP-0882	.38″	2″	8630H	4130H	302-363	1.44″
KP-0883	.50″	2″	8630H	4130H	302-363	1.31″
RK-0677 + XA-0767	.38″	3.5″	8630H	4130H	302-363	1.44″
RK-0677 + XA-0768	.50″	3.5″	8630H	4130H	302-363	1.31″



SAE 2.00″ KINGPIN



SAE 3.50″ KINGPIN

SECURED IN PLACE WITH EIGHT .75″ DIA. GRADE 8 BOLTS AND SAFETY LOCK WIRED BOLT HEADS

HOLLAND Replaceable Series

2″ and 3.5″ SAE Kingpin Installations

Applications

- Fast, economical kingpin replacement.
- Interchangeable 2″ and 3.5″ kingpin sizes.

Features

- Four weld-in housings for .25″, .31″, .38″, and .50″ bolster plate thicknesses.
- A single 2″ and a single 3.5″ kingpin are interchangeable between all housings.
- Secure kingpin installation featuring eight .75″ Grade 8 bolts with safety lock wired bolt heads.

Quality

- Weld-in housings are manufactured from AISI 4130H alloy steel for strength and weldability.
- Kingpins are forged from AISI 8630H alloy steel and hardened to 302-363 BHN.
- Kingpins are 100% Brinell hardness tested, magnetic particle tested, and ultrasound tested.

For additional specification detail, refer to document number XL-KP104-01.

Replacement Parts

Kingpins

RK-0676 2″ for all Housings, Includes RK-0882

RK-0677 3.5″ for all Housings, Includes RK-0882

Fastener Kit

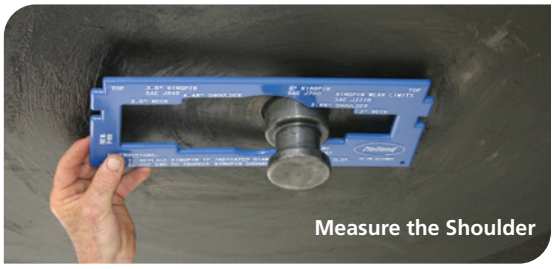
RK-0882 Bolts (8) and wire lock (1) kit
(Bolts feature drilled heads and thread lock patch)

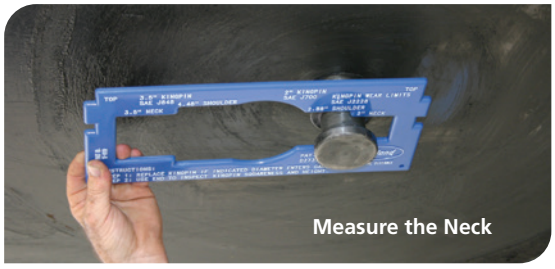
SAF-HOLLAND ORIGINAL PARTS™

Kingpin Gauge

TF-0110

Routine inspection of kingpins is just as important as the inspection of its fifth wheel mating partner. The HOLLAND Kingpin Gauge is a simple and easy to use tool for indicating undersized 2″ and 3-1/2″ SAE kingpins in need of replacement because of wear. This multi-purpose gauge can be used to check the length and straightness of the kingpin, and check the flatness of the bolster plate. The economical HOLLAND kingpin gauge is readily available from your local dealer or distributor.





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