

KRAUS KRT INVERTED FRONT END installation guide .v1

SPORT TOURING INVERTED FRONT END PACKAGE FITMENT: 2009-2018 FLHR Road King, FLHT Electra Glide, FLTR Road Glide and FLHX Street Glide

KRAUS Motor Company designs, engineers, tests, and manufactures performance suspension and braking systems for Harley-Davidson™ motorcycles designed to deliver improved road feel in real world punishing riding conditions.

KRAUS Sport Touring Packages come complete with a fork stem and all necessary stock hardware and parts to bolt a KRAUS Inverted Front Suspension Package up to your bike.

These instructions are meant to be an overview, a guide for the experienced technician. If you do not have prior experience or training installing motorcycle suspension componentry, we strongly recommend that you consider hiring a qualified, experienced technician to install this KRAUS Performance package for you.

About Finishes:

Like most finishes, anodizing is delicate and can be scratched. Extra care should be taken during installation and cleaning of all of our parts. Although we use a high grade type 2 anodizing that has UV resistance, anodizing is an organic process/ substance and can fade with excessive sun exposure or be stained with chemicals and cleaners.

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*Time Commitment: 1 full day for a Sr. Tech.
Existing Componentry and OEM Fork Set
Removal: 2 hours
KRAUS Performance Package install: 4 hours
Validation and Road Test: 1 hour*

Tools Required:

- *Torque wrench*
- *Allen Key Set: T-handle/ball and regular SAE & Metric*
- *Socket Set: SAE & Metric*
- *2 non marring wedges*
- *Bearing Press*

Begin at the point at which you have removed your OEM parts:

- Fairing
- Dash panel
- Key switch
- Front forks
- Triple tree

And any associated bodywork or accessories in the case of a Sport Tour installation.

Remember: take your time removing all of the controls and bodywork. We recommend covering your tank.

1
Clean/inspect races, bearings & dust shields then re-grease your bike's neck bearings for install. We strongly recommend replacing your neck bearings with new bearings.

2
Install/slide the lower neck bearing dust shield followed by the lower neck bearing onto stem. Press them carefully onto the stem attached to the lower triple tree.

3
Press the lower bearing down the stem towards the dust shield until firmly seated at the stem's base. The bearing should spin freely.

4
Apply the specified and appropriate grease to the upper and lower neck bearing races.

5
Carefully slide bottom triple tree and stem up through frame neck.

6
Carefully place the top neck bearing onto the stem.

7
Gently press the upper bearing down the stem towards the fork neck until firmly seated on the top bearing race. The bearing should spin freely. Place top dust shield over the top neck bearing.

8
Tighten the stem yoke nut to **25 ft. lbs.** or until there is friction felt on bearing movement/play. Next, slightly loosen yoke nut until no friction is felt.

9
Install bars and risers onto top triple tree.

10
Install the top triple tree onto yoke nut, ensure that it is seated properly onto the bearing dust shield.

11
Ensure the triple tree moves freely from side to side.

12
Ensure pinch bolts are loose. Starting with one side of the triple tree using small flat blade screwdrivers or shims, expand both top and bottom fork clamp pinch bolts slightly, making sliding the fork into the triple trees easier, while avoiding damaging the fork legs. Repeat process with opposite side.

13
Make sure right and left forks are in their proper position. Riders right side fork has a through axle hole and pinch bolts. Left side fork has a threaded axle hole.

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14

Slide each fork leg upwards into triple trees clamps; avoid scratching the fork tubes. Ensure top triple tree does not lift of the dust shield.

15

Adjust the fork tube height in the triple trees so that just the fork cap is protruding above the top triple tree. Push down on top triple tree to make sure the top triple tree has positive contact with the top neck bearing dust shield. Set both forks equal height in triple trees, confirm alignment by sliding the axle into the slider bottoms.

16

Tighten the KRAUS **top** triple tree fork pinch bolts to **20 ft. lbs.** torque.

17

Tighten the KRAUS **bottom** triple tree fork pinch bolts to **12 ft. lbs.** torque.

18

KRT Front Fender Mounts come pre-installed onto the KRAUS fork lowers. Please do not remove. If removed for service of forks re-torque to **132 in. lbs.** using supplied hardware. Make sure axial alignment is correct for proper fork and upper tube clearance.

19

Prepare axle for install by lightly coating the surfaces of the axle with anti-seize or grease.

20

The axle will slide through right side of fork foot into the KRAUS supplied right wheel bearing spacer, through wheel hub and then supplied left wheel bearing spacer (or ABS sensor dependant on model), and into the right fork lower leg receiver. Make sure fork legs are properly aligned and the axle threads properly into the left foot. This is a fine thread, please take extra care to not cross thread the axle and foot.

21

Apply a small amount of **Blue** threadlocker to the axle threads and torque to **85 ft. lbs.**

22

Align forks on the axle before tightening axle pinch bolts to **15 ft. lbs.**

23

Mount calipers onto the KRAUS fork lower leg caliper receivers using M10x1.25 bolts. Use a dab of **Blue** threadlocker on bolt thread, torque caliper receiver bolts **32 ft. lbs.**

24

Brake pads must be properly aligned and have full contact potential with rotor friction area. If using Radial Calipers add caliper mount spacers depending on rotor size.

25

Carefully and slowly rotate wheel making sure there are no alignment and clearance issues.

26

Install front fender using supplied bolts and black delron spacers. Place the spacers between the fender and the forks. The longer spacers are to be installed in the rear fender mounts. (For 2013 and earlier bikes will only have spacers on the rear fender mounts.)

27

Mount fender and torque the fender mounting bolts to **15 ft. lbs.** using a dab of **Blue** threadlocker on bolt thread.

28

Again carefully and slowly rotate wheel making sure there are no alignment and clearance issues.

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29

Setting Fallaway:

Raise the motorcycle so that the front and rear tires are the same distance from the floor.

Turn the front wheel to the left Fork stop and then let go. The wheel should swing from side to side, finally stopping in the swing specified in **schematic 3**. If it stops in the lesser number swing it should be at or after the straight-forward position.

Make sure the clutch cable or main harness is not influencing the swing momentum in any way.

A steering head that is too tight can interfere with the vehicle's ability to absorb a weave. A steering head that is too loose can interfere with the vehicle's ability to absorb a wobble.

30

Apply threadlocker **Blue** to yoke nut pinch bolt and torque to **65 ft. lbs.**

31

When installing your brake line, validate brake lines are proper length and not stressed or stretched whether the front end is compressed or extended.

32

Once the front end is installed and tightened up to specifications, you are ready to reinstall all of the componentry that you removed.

- Fairing
- Dash panel
- Key switch

And any associated bodywork or accessories, in the case of a Sport Tour installation. We recommend that you refer to your OEM manual for procedure, step by step run through, required tools and specifications.

All pieces and parts are properly installed! Go for a slow, careful test ride. Afterwards, double check all pieces, parts and systems.

schematic 3

