



Fitting Advice XK140/150 Steering Gear Into The XK120

RACK and FIXINGS TO CHASSIS:

First, a rebuilt or new steering rack needs to be obtained. These are available from us as new, lightweight outright purchase: SEE: [4195](#)

If you source a correct old unit, this can be exchanged / rebuilt by us or if required can be converted by us to the opposite hand drive for an additional small modification charge. SEE [8602](#)

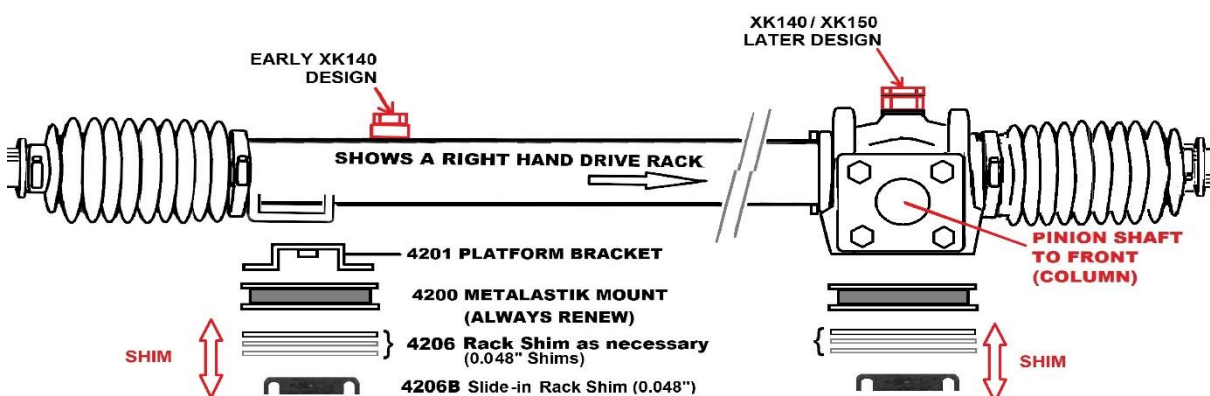
For correct track rod ends for this conversion you will require:

2 x Track Rod Ends > Use 2 x XK120 RH Thread : [4181](#)

2 x Track Rod Clamps : [4191](#)

NOTE: Unlike the XK120, the XK140/150 steering racks do not use mirror image threads, but just standard right hand threads at each end, so 2 x XK120 RH track rod units are used to mate to the XK120 steering arms which feature larger taper joints to steering uprights.

THERE ARE 2 VARIANTS OF THIS LEY'S DESIGN STEERING RACK THAT ARE INTERCHANGABLE



IMPORTANT: NEW RACKS ARE LINE BORED, WHICH ENSURES THE RACKBAR RUNS PERFECTLY BETWEEN THE OIL-LITE BUSHES. THIS IS AN INTERNAL MACHINING PROCESS AND AS WITH MOST XK COMPONENTS MEANS THE RACK CASING MUST BE SHIMMED ONTO THE CHASSIS.

THIS PREVENTS DISTORTION OF THE RACK WHICH CAUSES STEERING 'DRAG'.



Racks should be shimmed square to the chassis with : [4206 KIT](#)

The tube side requires a riser / platform bracket : [4201](#)

Fit New Metalastik Rubber Rack Mounts x 2 : [4200](#)

Always Use Rack Safety Kit if using Rubber Mounts 4200 : [4204](#)

Or for more feedback or racing use Solid Steel Rack Mounts : [SE436](#)

XK120 CHASSIS PREPARATION:

First the radiator will need removing so that you can withdraw the complete steering box and arm from the vehicle front, after firstly removing steering wheel and manette (Horn & Indicator) mechanism etc. The complete idler and all steering cross links and knuckles should also be removed, until only the steering arms are left in position on each wheel upright.

To attach the new rack to the XK120 chassis you will require our special weld-in, steering rack mounting brackets : [SE427](#) using the new rack for bracket reference points. Once the rack is secured safely in place, with safety kit, we look to the upper end.

YOU WILL NEED TO SOURCE AN UPPER XK STEERING COLUMN:

Using an original XK column is preferable and we can offer original steering columns when we have them in stock, bundled with full rebuild kits as we manufacture all the rebuild parts for steering and horn power feed that now comes off outer tube brass contacts :

For Original XK140 Upper Steering Column SEE : [COL 140](#)

For Original XK150 Upper Steering Column SEE : [COL 150](#)

The LATE XK150 COLUMN also features a cancelling indicator stalk mechanism, so this may be the best option if one is available :



For new Late XK150 Indicator Mechanism SEE: [5681](#).

For new Late XK150 Indicator Cowls / Covers SEE: [5682](#).

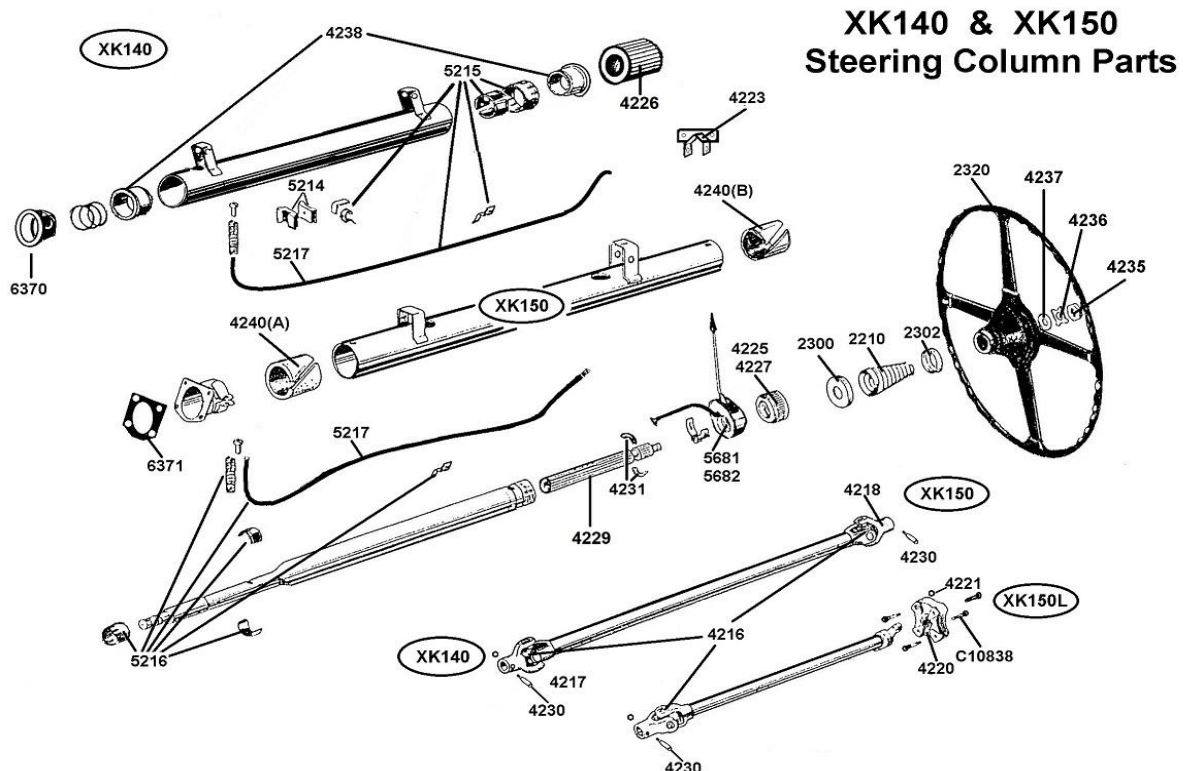
To fix top of column adapt 140/150 Mounting Bracket : [4223](#)

The above bracket can easily be adapted to secure a lower column bracket to the bulkhead, and for an XK140 SEE: [6370](#) grommet to fill the 2 inch hole plate used by the XK120 steering column.

To complete you require to a new XK140/150 Steering Wheel: [2320](#)

If you do not purchase a rebuild kits, you will require wheel securing Collets ([4231](#)), Washer ([4237](#)), Lock Tab ([4236](#)) and wheel securing Top Nut ([4235](#))

For column adjuster spring and cups SEE: [2210](#) & [2300](#) & [2302](#)





The XK140/ XK150 Horn mechanism can be simply fitted to top off the wheel with a later style flat horn button and surround : [5211](#)

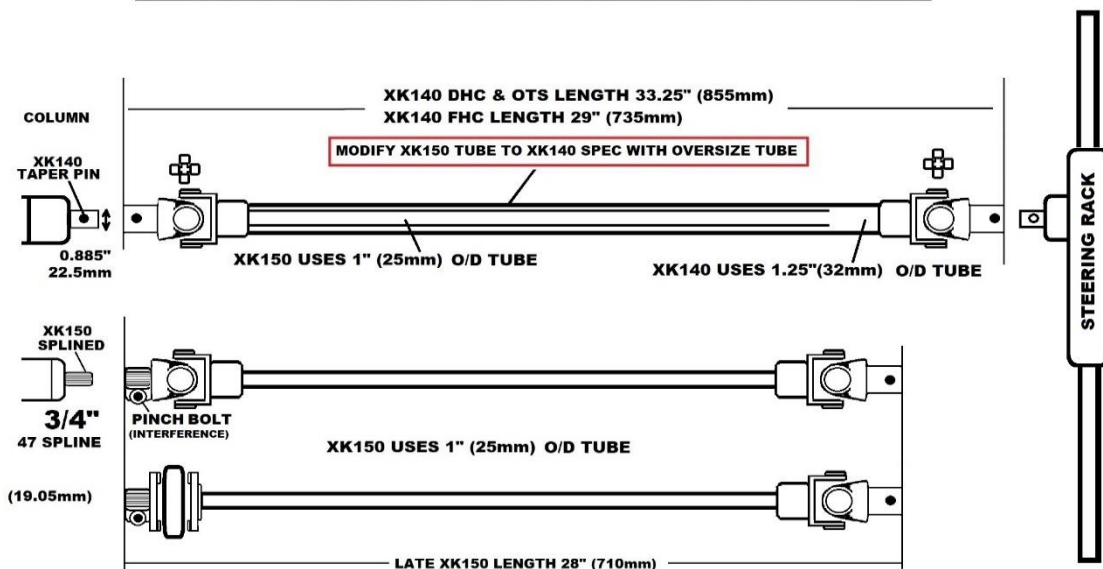
LOWER STEERING COLUMN LINK:

Both the XK140 Lower steering Column and the steering racks secure with taper pins ([4230](#)) through a U.J. Half-Yoke : [4217](#)

If an XK150 upper column is used a splined yoke will be required to it. Rubber Cross UJ SEE: [4219](#) to be fitted with new [4220KIT](#)

or we can alternatively supply a splined yoke for a metal $\frac{3}{4}$ " U.J. as shown below (lengths listed are for standard XK140 & XK150).

XK140 / XK150 LOWER STEERING COLUMNS



A Lower Column section can be custom made to suit the fittings and distance you require, to fit your car / driver position.



Approximate cost for manufacture of this kind of double yoke link is about £200 (date 04/11/2020). XK120 Drivers over 6ft tall will appreciate any extra space produced in an XK120 Cockpit by setting the steering wheel nearer to the dashboard.

FITTING A RADIATOR:

The XK120 Radiator will foul the new rack upon trying to refit, but the unit's bottom tank does have enough capacity to be custom relieved to suit.

Alternatively, the XK140 Later designs of Radiator are slimmer and can be used with a few fitting adaptations, but you will have to use an XK140 or XK150 inlet manifold for fitting of a thermostat, as the XK120 radiator features this within its top tank, so this needs to be taken into account too.

For Radiator options SEE: [XK140 Radiator options](#)

NOTE: THIS IS NOT A DEFINITIVE INSTRUCTION SHEET, BUT IS PROVIDED AS A GENERAL GUIDE FOR BASIC COSTING AND FITTING PROCEDURES, BUT WILL INCLUDE A DEGREE OF FABRICATION DEPENDING ON YOUR EXACT MODEL SPECIFICATION, SO DO INVESTIGATE YOUR VEHICLE BEFORE BEGINNING THE PROJECT.

S.G.MacNeill

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