Production Racer Headsteady

General Remarks

The Norton Commando Production Racers that were assembled in the Thruxton Race shop had some special parts. The headsteady, forming a third isolastic mounting between cylinder head and top frame tube, hindered the engine to move laterally under that tube. This movement can be seen with the Commando on the centre stand by putting one's weight on one footrest at a time. The production arrangement with two silent bloc bushes offers little resistance, which can be noted going through a bend at high speed, or in a bumpy bend at any speed- the rear wheel kicks out laterally against the frame.

The racing headsteady puts an end to that, and the bike feels infinitely more "together" with a totally new, confidence-inspiring report from the rear end of the motorcycle. As opposed to other offerings in the market we use two rubber elements, as per the original drawing Peter Williams made in1969 that we own.

In the re-development of the headsteady we have found the position and distance from cylinder head to frame tube are never identical from Commando to Commando after thirty years of modifications and mix-and-match assemblies. This plays no role with the standard production arrangement where the silentblock bushes "give" as much as necessary, but this new headsteady must be mounted unstressed. We have, therefore, not only put "adjustment slots" in the various parts, but also include shims that allow the installation in the ideal position horizontically and vertically.

Installation Instructions

Remove seat.

Shut petrol taps, disconnect fuel pipes, take petrol tank off.

Remove old headsteady, including silent block bushes and (on Mk3 models) the steel spring arrangement to the front.

Put new headsteady assembly in position, put the allen screws with washers through the base plate into the threaded holes of the cylinder head. DO NOT TIGHTEN DOWN.

Put the clamp on the lower, small diameter frame tube with the clip topmost, assemble loosely. DO NOT TIGHTEN DOWN.

Put the two hexagon bolts with the washers as per drawing through the rear holes in the triangular side plates, put the round spacer on the bolt, and screw the bolt into the threaded holes that had taken the silentblock bushes previously. DO NOT TIGHTEN DOWN.

Loosely thread the other hexagon bolts with washers through the front holes of the triangular plates and into the threaded sides of the clamp.

Now stand back and have a look- where do you find gaps, sideways or in height, that need filling up with shims? Insert shims so that the whole assembly is correctly positioned without using force. Putting shims from one side of the head steady mounting point on the frame to the other will get the headsteady in the correct position under the frame relative to the cylinder head.

If you are satisfied everything is in the correct position and no part is bent or stressed, tighten all bolts fully.

Check the side play of the headsteady as you normally check the sideplay of the other isolastics. Ideal side play is 0.010”/0.25mm. Adjust using flat nut and counternut on the main bolt. In new condition insertion of suitable steel washers into the end caps is unnecessary. As the PFTE washers wear this may eventually become necessary. The steel washers are available under part##s 06-0775 through 06-0779, normally used on pre-Mk3 rear isolastics. Adjust as necessary and counter the nut with the counternut.

Put petrol tank back on. Watch that the tank is correctly positioned so that there is enough room between headsteady and petrol tank “tunnel”. Roadster tanks are most critical in this respect. When you are satisfied there is clearance on both sides, fix petrol tank in that position.

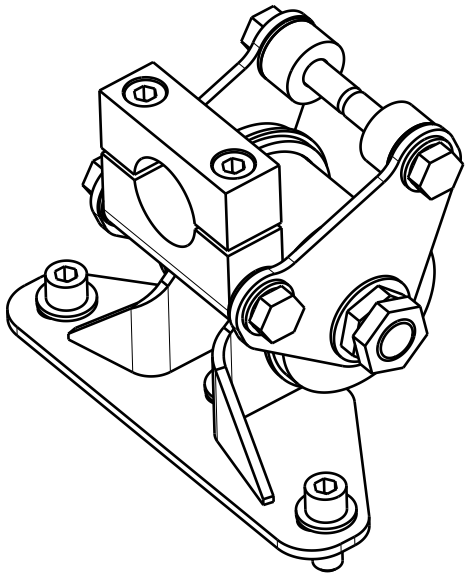
Put petrol pipes back on.

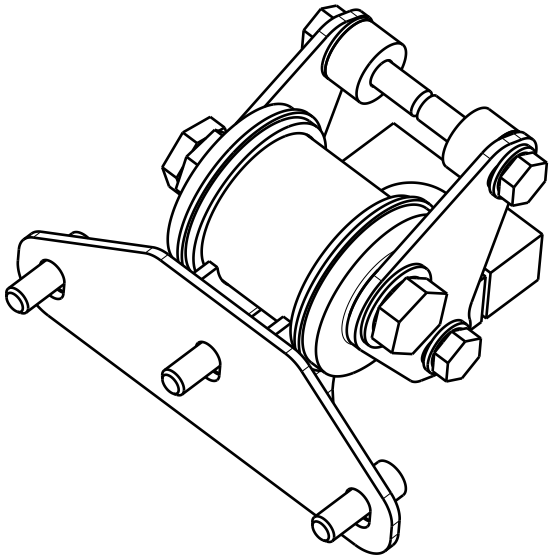
Put seat into position. Fix it.

Set off for your first test ride. Be careful- the ride is different! Depending on the previous state of your isolastics it can be radically different. It is a good idea to check the front and rear isolastics too, now that you have improved your chassis anyway. Vibrations will be more noticeable as the assembly is now more “rigid” than before.

Other improvements available from Andover Norton:

- Brake improvement kit 13-1600 and (Mk3) 13-1620;
- Electronic ignition kit (Pazon) 13-1500;
- Luggage carrier system 06-7270 resp. 06-7271;
- Panniers 06-7272 resp.06-7273, top box 06-7274;
- Isolastic conversion kit to Mk3 condition; front 06-7116, rear 06-7117.
- Commando tool kit 06-7268





Parts List: Headsteady

Ref. No.	Qty	Description	Norton Part No.
1		Engine Steady Bracket (Grundkoerper)	06-7257
2	2	Side Plate (Seitenblech)	06-7258
3	1	Clamp Top (Schelle Oben)	06-7259
4	1	Clamp Bottom (Schelle Unten)	06-7260
5	2	Spacer (Distanz)	06-7261
6	2	End Cap (Abschlussstueck)	06-7256
7	2	Isolastic Bush (Daempferelement)	06-7262
8	A.R.	Shim 0.005", 0.01", 0.02", 0.03"	06-0775 to 06-0778
9	2	Thrust Washer (Gleitscheibe PTFE)	06-4748
10	2	End Cap (Kragenscheibe)	06-7265
11	1	Hex. Bolt 1/2" UNF x 3"	14-0264
12	2	Washer 1/2" x 1" x 1.4mm	60-2333
13	3	Allen Screw 5/16" BSF x 3/4"	06-7745
14	3	Washer 5/16" x 16mm x 1.9mm	60-2321
15	2	Hex. Bolt 5/16" UNF x 3/4"	14-0114
16	2	Hex. Bolt 5/16" UNF x 1.25"	14-0117
17	2	Allen Screw 5/16" UNF x 7/8"	14-1019
18	2	Nut 1/2" x 5.2mm	06-0005
19	17	Washer 5/16" x 3/4" x 1.2mm	60-2348

Scale: 1:2

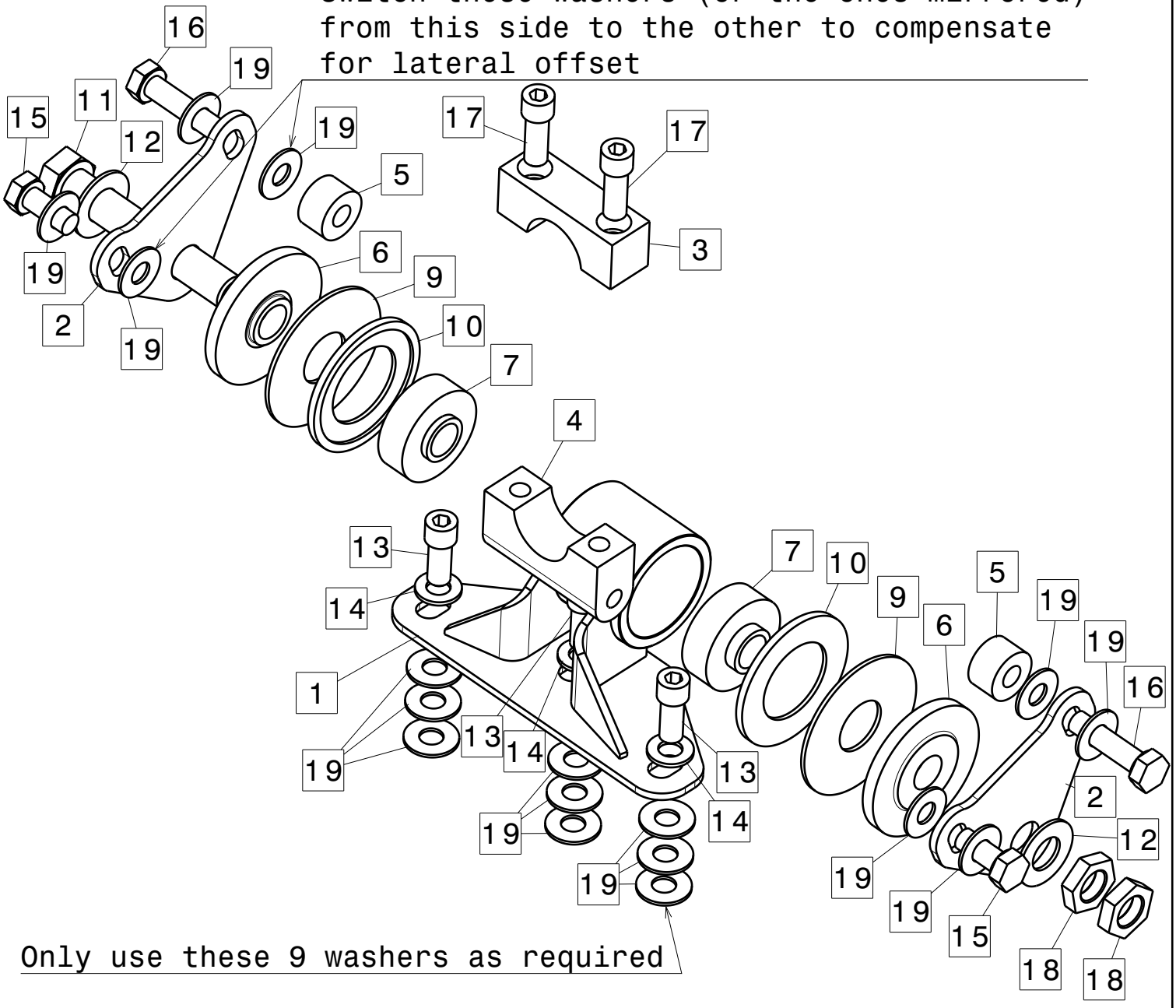
P/N° 06-7263

	Date	Name
Drawn	03/06/11	T.S.

Norton Motors

Headsteady
Parts List

Switch these washers (or the ones mirrored) from this side to the other to compensate for lateral offset



Only use these 9 washers as required

		Scale: 1:2	P/N° 06-7263
	Date	Name	(c) 03/2011
Drawn	03/06/11	T.S.	
			Headsteady Assembly