

TO: ALL ROOTES GROUP DEALERS
 MODEL: SUNBEAM IMP
 SUBJECT: TORQUE LOADINGS

May we remind you of the importance of adhering to torque loading figures in all work connected with the Imp.

Not only must a torque loading spanner be used when an item is replaced or a unit reassembled, it is equally important that checks at the P.D.I., First Free Service and voucher book services calling for checks of nut or bolt tightness are carried out with a torque spanner.

All torque loading figures appear in the General Data Section of the Workshop Manual but for further reference they are duplicated herewith.

IMP TORQUE LOADING FIGURES

ENGINE

Cylinder head retaining bolts (tighten when cold)	.. 34lbs.ft.	(5 kg.m)
Crankshaft (Mains)	.. 41 " "	(5.6 kg.m)
Con. rod (Big-end)	.. 18 " "	(2.4 kg.m)
Bell Housing Studs (Engine to Transaxle)	.. 9 " "	(1.2 kg.m)
Camshaft bearing cap nuts	.. 5 " "	(.7 kg.m)
Sparking plugs	.. 14 " "	(1.9 kg.m)
Camshaft sprocket setscrew	.. 19 " "	(2.6 kg.m)
Flywheel to camshaft	.. 32 " "	(4.4 kg.m)
Nuts - $\frac{1}{4}$ inch UNF	.. 5 " "	(.7 kg.m)
- 5/16 inch UNF	.. 15 " "	(2.1 kg.m)
Studs - $\frac{1}{4}$ inch UNC/UNF	.. 5 " "	(.7 kg.m)
- 5/16 inch UNC/UNF	.. 5 " "	(.7 kg.m)

TRANSAXLE

Output shaft	.. 45lbs.ft.	(6.2 kg.m)
Input shaft	.. 45 " "	(6.2 kg.m)
Bevel pinion bearing pre-load-New Bearing	.. 14/20lb.in.	(.16/.23 kg.m)
- (Spring balance reading)	.. 9/12/51b.in.	(.1/.14 kg.m)
- Used bearings	.. 7/10lb.in.	(.08/.11 kg.m)
- (Spring balance reading)	.. 4 $\frac{1}{2}$ -6.25lb.in.	(.05/.07 kg.m)

TRANSAXLE (continued)

Casing nuts	$\frac{1}{2}$ " UNF	Hot (16lb.ft. (2.2 kgm))	Cold	.. 11 lb.ft.	(1.5 kg.m)
	$\frac{5}{16}$ " UNF	(17lb.ft. (2.4kgm))		.. 12 lb.ft.	(1.7 kg.m)
		The cold torque reading is more often used.			
Crown wheel to cage				.. 29lb.ft.	(4.0 kg.m)
Drive flange nuts				.. 105 "	(14.5 kg.m)
Bell housing nuts				.. 25 "	(3.5 kg.m)
Clutch release lever nut				.. 11 "	(1.5 kg.m)

FRONT SUSPENSION

King-pin carrier to wishbone - Vertical		.. 48lb.ft.	(6.6 kg.m)
	- Horizontal	.. 74 "	(10.2 kg.m)
Wishbone pivot bolts		.. 25 "	(3.4 kg.m)
Suspension support bracket - - Front		.. 27 "	(3.7 kg.m)
	- Rear	.. 27 "	(3.7 kg.m)
Road wheel nuts		.. 48 "	(6.6 kg.m)
Shock absorber to suspension		.. 43 "	(5.9 kg.m)
Suspension member to body		.. 20 "	(2.7 kg.m)
King-pin retainer nut flat to be square with taper		.. 6 "	(.8 kg.m)
Front hub locknut		.. 13 "	(1.7 kg.m)

REAR HUBS & DRIVE SHAFT

Rear hub nut		.. 170lb.ft.	(2.35 kg.m)
Rotoflex coupling bolts		.. 34lb.ft.	(4.7 kg.m)

STEERING

Steering unit attachment 'U' bolt		.. 14lb.ft.	(1.9 kg.m)
Steering unit to track rod		.. 53 "	(7.3 kg.m)
Track rod ball joint		.. 33 "	(4.5 kg.m)
Steering arm to stubaxle		.. 33 "	(4.5 kg.m)
Inner column pinch bolt		.. 8 "	(1.1 kg.m)

BRAKES

Backplate to stub axle		.. 14lb.ft.	(1.9 kg.m)
Wheel cylinder to backplate		.. 5lb.ft.	(.7 kg.m)

REAR SUSPENSION

Crossmember to body		.. 27lb.ft.	(3.7 kg.m)
Engine mounting to crossmember		.. 27 "	(3.7 kg.m)
Shock absorber to body		.. 14 "	(1.9 kg.m)
Shock absorber to suspension		.. 25 "	(3.4 kg.m)
Suspension pivot bolts		.. 43 "	(5.9 kg.m)

CLUTCH

Clutch to flywheel bolts


.. 71b.ft. (9.6 kg.m)

COOLING

Fan cowl to water pump body

.. 151b.ft. (2.0 kg.m)

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