

# PRO

Motor maintenance is an area which is often either overlooked, neglected or done in a bad or incorrect way. As a general rule you should take the motor out of your car at least every second heat and give it the 'once over'.

You should remove the springs, putting them in a safe place so you don't lose them, and remove the brushes (looming carbon pieces) from

**Mike Haswell**

# Pro Ten



Q A dirty, old, worn commutator before skimming.

their holders. You will notice that the commutator (copper face inside motor) has some black marks on it where the brushes usually run. This is perfectly normal and occurs in all motors to some degree. However, if your armature has heavy black marking over the



Q One more skim should do it!

commutator then it is time to get it skimmed, as it is probably out of true or deformed.

In severe cases you will notice that

the commutator bows inwards where the brushes have been running and have worn the commutator away. In the past if you needed your armature skimming you would have had to have sent it away to one of the more specialised shops.

Since the advent of the portable comm-truing machines, however, such as the Twister, it is possible to get them trued/trackside as at most clubs there is somebody with one of these comm-truing machines who will do it for a small fee (approx. £2-£3). (You didn't expect him to do it for free, did you? They do cost a small fortune to buy!) Expect your armature to need skimming every 20 or so runs, which is roughly after every

Q A fully skimmed commutator looks as good as new!

3-4 meetings, for maximum performance.

For the more general cleaning of the commutator and removing of the carbon deposits I use one of the readily available comm cleaning sticks, such as Twister, Trinity or Edge, as it is a quick, easy and very effective way of doing the job.

The sticks are cut in the shape of a brush at one end so that by putting them down the brush holder you can clean the comm without having to take the motor apart. Applying a light pressure, hold the stick against the comm and rotate the motor four or five times in the direction it usually travels. If you leave the pinion on it will make it easier to turn the motor over and if you hold the motor in your left hand you should be turning the motor in an anti-clockwise direction.

One of the things that shouldn't really be used on comms is Duraglit as this leaves a film/deposit on the copper and between the segments, unless you are extremely careful. Once you have cleaned the comm, move on to the brushes. Most comm sticks have a round end which is used to clean the brushes where they touch the commutator. Put the comm stick into the groove that has been worn where the brush has been running on the comm and rotate it a couple of times across the brush face to remove any carbon deposits. If you have just had your motor skimmed it is advisable to fit new brushes to gain maximum advantage from the motor.

Before taking your motor apart you should mark the can and the endbell to show where the timing is set, and also which side the positive goes to. Do not

use a 'permanent marker' as some of the motor cleaning sprays can clean the marks off. Now that you have skimmed your commutator and fitted new brushes, your motor should be as good as new.

Q Comm sticks are good for frequent cleaning of the motor.

Below is a list of all the places to send your Pro Ten entries to for the coming season:

## SOUTHAMPTON

**April 14**  
Mick Langridge  
PO Box 76  
Fareham  
Hants  
PO14 4SP  
Cheques payable to: SRCMCC

## ASHBY/GP

**May 4-6**  
Jason Dearden  
3 Woodlands Way  
Molra  
Burton-on-Trent  
Staffs DE12 6HE  
Cheques to: AMCC

## CRYSTAL PALACE

**June 2**  
Alan Besant  
138 Grieson Road  
Forest Hill  
London  
SE23 1NX  
Cheques to: URCC

## HALIFAX

**June 16**  
Mrs C Diggers  
76 Westroyd Avenue  
Mirkfield  
W Yorks  
WS14 5LB  
Cheques to: YRCMCR

## BOURNEMOUTH

**July 14**  
Colin Newman  
202A Albert Road  
Parkstone  
Poole  
Dorset  
Cheques to: BRAC

## ALDERSHOT

**July 28**  
John Smith  
8 Trinity Road  
Knaphill  
Woking  
GU21 2SY  
Cheques to: AMC

## STAFFORD

**August 11**  
John Robson  
1 Aldersleigh Drive  
Wilsow  
Staffs  
ST17 4RY  
Cheques to: GEC Sychfields

## STONEHAVEN

**August 25**  
Ian Cowson  
26 Newburgh Road  
Bridge of Don  
Aberdeen  
Scotland  
Cheques to: SDRCC

## MENDIP

**September 8**  
Paul Wilkinson  
Five Ways  
119 Cairncross Road  
Stroud  
Glos GL5 4HW  
Cheques to: MMRC

## TAMWORTH

**September 29**  
TBA/W Davis  
247 Main Street  
Glascoate  
Tamworth  
Staffs  
B77 2AU  
Cheques to: TBA

You should have your entries in for Southampton by now which is only two weeks away. Entry fees are £6 for all Nationals apart from Ashby, which is the British GP, for

which BRCA points are being awarded. If you have any problems contact the Pro Ten secretary on 081-573-2500 (evenings). @



All NOSRAM products available from good model shops. Send SAE for a full comprehensive product price list. P&P on all orders £1.00 with same day dispatch. 48 hour turnaround on requests where possible. Please check with your local distributor.

**NOSRAM DISTRIBUTION, 10 BRONZE DRIVE, MALVERN, WORCESTERSHIRE WR14 1LE. TELEPHONE 0564 567655. FAX: 0564-567655**

Monday-Friday 9am-5pm. Orders by appointment. TRADE ENQUIRIES WELCOME

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Nos.2 Electronic	5pts	£76.95	Nos.12 Sanyo 1700 SCF	£34.95
Nos.3 Electronic	11pts	£89.95	Available in stock or saddle pack.	
Nos.4 Electronic Pro	12pts	£121.80		
Nos.7 Electronic II	12pts	£139.95		

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Nos.8 International Pro	7pts	£29.95		
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**STAFFORD**  
August 11  
John Robson  
1 Aldersleigh Drive  
Wilsow  
Staffs  
ST17 4RY  
Cheques to: GEC Sychfields



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**CONGRATULATIONS** to Mark Austin, winner in January at St Albans Rally Championship using Turbo Silver Star Clayton Collins was 2nd PTD using Turbo Gold Star.

Products available from retailers or direct - post free - from:  
**SPEEDMASTER, 60 Mancroft Road, Caddington, Luton, LU1 4EL. Tel: 0582 34787**