

# DIY Workshop

## IN THE SERIES...

**JAN** WORN GRAPHICS  
ISSUE 39 Bring back that new bike feel...

**FEB** WIRING DISASTERS  
ISSUE 40 Tame the wiring harness jungle...

**MAR** BRAKE SERVICE  
ISSUE 41 Start looking after your stoppers...

**APR** WHEEL BEARINGS  
ISSUE 42 Roll clean, and free...

**MAY** CHAIN & SPROCKET  
ISSUE 43 Tired old teeth slow you down...

**JUN** CONTROL REFRESH  
ISSUE 44 If you can't put your finger on it...

**JUL - AUG** DON'T GET  
DUSTED  
ISSUE 45 Keep that box clean...

## MEET THE TEAM



**NICK DOLE**  
As owner/operator of Teknik Motorsport, Nick's Sydney-based workshop specialises in suspension and mechanical repairs.



**IAN HANCOCK**  
As a skilled moto-journalist, Ian's not scared of compiling a technical feature that delves into the mechanical depths.



## TOOLS YOU'LL NEED

- Spanners, T-bars and Socket Set
- Gloves
- Rags

## WHAT IT'LL COST YA

- Labour: 20 minutes
- Filter Oil: \$25

# AIR FILTER SERVICE

Keep her breathing easy, change that filter often...

IAN HANCOCK

Cleaning your bike's air filter ranks right alongside changing your oil as the most important maintenance task you can do to properly look after your engine. Short of writing off your pride and joy in an accident, the quickest way to destroy a perfectly good machine is an iron lung-full of dust being sucked through your cylinder ... because a full

rebuild is a highly likely scenario if you don't maintain your air filter.

Most modern bikes come standard with high-quality foam filters, but it's well worth investing in two or three spares. This allows you to keep a rotation going and do all the dirty work in one batch. Old filters can also start to break down over time, so invest in new ones every couple of years.

Filters always get dirty wherever you ride, so get into the habit of checking your filter before each and every ride. Ideally, change the filter between every ride, or at least try to ensure it's seated correctly and is relatively clean.

Over the next two pages, Nick Dole from Teknik Motorsport explains how a filter change is properly done.



## REMOVE THE FILTER

1

Once you've removed the airbox lid – or seat – necessary to access your filter, grab a clean rag and wipe

any dirt away from the edge of the filter and from around the airbox. This prevents crap accidentally falling

into the air boot when the filter's out. Then, remove the fastening screw or bracket and pull the filter out.



## INSPECT THE AIR BOOT

2

With the foam filter out, grab a torch and have a good look inside the black plastic air boot

leading to the throttle body or carb. Wipe your (clean) finger and check for any dust. Even the lightest of coatings

may indicate that dirt has bypassed the filter, which could signal trouble for your engine.

### CLEAN & RINSE THE FILTER

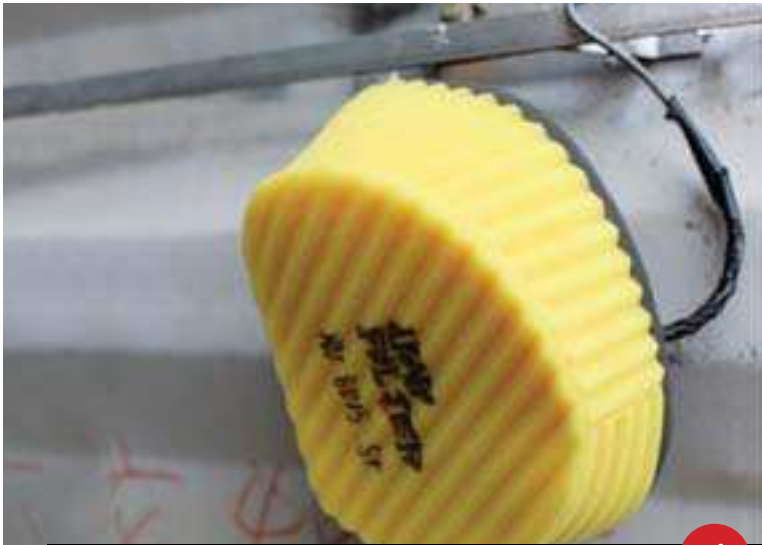
**P**ull the foam filter off its plastic frame, and soak the filter in a kerosene-based solvent (petrol can deteriorate the foam and glue). Once the oil has broken down after a minute or two, use your fingers to work out any trapped dirt particles from the foam elements. A rinse in warm soapy water will ensure a thorough clean.



3

### OIL THE FILTER

**A**ir filter oil is seriously sticky stuff, so the cleanest way to oil a filter is to wear gloves to work the oil through the filter, or put the filter in a plastic bag to mush the oil through. Ensure that the oil has passed through all of the foam pores. Aim for an even coverage, but with any excess oil squeezed off – otherwise your bike's air intake may be unnecessarily restricted.



4

### DRY THE FILTER

**E**nsure the filter's dry before oiling. To speed up the process, you can place it on newspaper or paper towel or hang it on a fan, but by far the most efficient way is to hit it with pressurised air. Avoid hot air guns, though, as this can melt or degrade the glue used in the filter's construction.



5

### Filter Skins



**A**ir filter skins are a thin, stocking-like material that is designed to fit snugly over your air filter to act as a kind of pre-filter. The idea is that the skin can be pulled off when dirty, leaving your foam filter largely clean and extending the intervals between filter changes. Skins are cleaned in the same way as filters. They are great for multi-day trailrides, but not everyone uses them, as they restrict airflow and require special care to ensure a good seal between the filter and airbox.



### RE-INSTALLATION

**W**ith the filter cleaned and oiled, reinstall the filter on its plastic frame. It's a good idea to leave the oil to set for a few hours before re-installing on the bike. Now put a generous

layer of grease around the airbox seat and the sealing surface of the filter. This will prevent any dust entering around the filter. Ensure the filter is seated neatly and fastened.

6

### Cleaning the Airbox



**O**ver time, your airbox will get a build-up of grease and dirt. Degreaser will help, but the best way to really get your airbox clean is to pull the whole subframe off, together with the airbox, then hit it with a pressure washer. When re-installing the subframe, be particularly careful when fitting the air boot back onto the throttle body or carb - a loose or misaligned boot will suck in unfiltered air and kill your engine.