HOW TO CHANGE THE STARTER MOTOR TOOLS REQUIRED

SOCKET SET - I THINK WE USED AN 8MM, A 12 OR 13MM AND A 16MM. YOU'LL ALSO NEED SHORT EXTENSION PIECES AND/OR A "WOBBLY" (SEE PHOTO 3 BELOW), AS IT'S UNLIKELY THAT YOU'LL GET THE RATCHET HEAD INTO POSITION.

EMERY PAPER TO CLEAN UP THE MATING SURFACES.

COPPER GREASE FOR THE BOLTS.

1) DISCONNECT THE BATTERY, I JUST DISCONNECTED THE NEGATIVE LEAD.

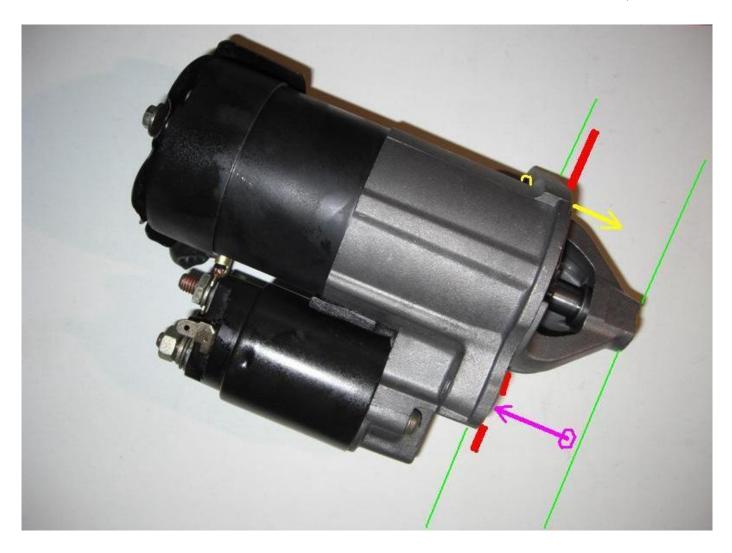
TO REMOVE THE MOTOR YOU NEED TO REMOVE THE OIL DEFLECTOR PLATE.

I FOUND IT BEST TO UNDO THE TWO BOLTS HOLDING THE MOTOR ON, THEN REMOVE
THE OIL DEFLECTOR (BELOW THE OIL FILTER) BEFORE FINALLY REMOVING THE
MOTOR, AS THIS SEQUENCE GIVES YOU A LITTLE EXTRA ROOM TO REMOVE THE
DEFLECTOR'S BOLTS.

THERE ARE TWO BOLTS HOLDING THE MOTOR ON,
O THE YELLOW ONE GOES THROUGH THE MOTOR FLANGE AND SCREWS INTO THE
THREADED FLYWHEEL CASING (RED),

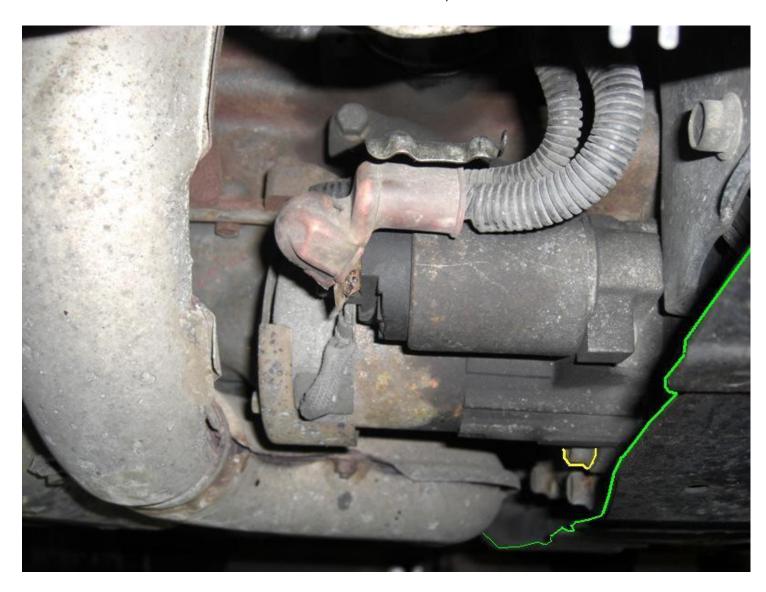
O THE PINK ONE GOES THROUGH THE FLYWHEEL CASING THE SCREWS INTO THE THREADED MOTOR CASING.

(THE GREEN LINES SHOWS THE OUTLINE OF THE ENGINE BRACE THAT RUNS UNDERNEATH THE ENGINE, ALSO SHOWN IN THE SECOND PHOTO.)



2) REMOVE THE RED SILICONE-RUBBER COVER (PIC BELOW) AND THEN USE A SOCKET TO DISCONNECT THE MAIN LEAD. NEXT REMOVE THE SPADE CONNECTOR FROM THE SOLENOID'S LUG.

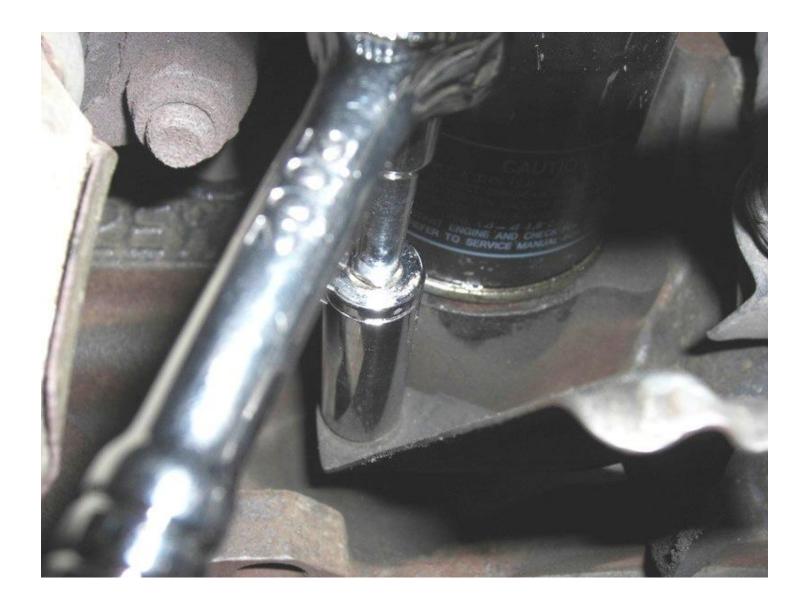
THE MOTOR-SIDE BOLT IS OUTLINED IN YELLOW, (PIC BELOW).
THE OTHER BOLT IS FOUND ON THE OTHER SIDE OF THE ENGINE BRACE (BRACE IS OUTLINED IN GREEN).



3) HERE'S THE "WOBBLY" IN ACTION UNDOING THE YELLOW BOLT, AS THERE'S NO WAY THAT THE RATCHET HEAD WILL FIT IN LINE - AS THE MOTOR BODY AND THEN THE EXHAUST GETS IN THE WAY.



4) UNDOING THE OIL DEFLECTOR'S BOLTS



- 5) THE MOTOR SHOULD NOW JUST COME OUT OF THE SPACE IF YOU PUSH THE LEFT HAND END UP TOWARDS THE OIL FILTER REMEMBER HOW YOU DID THIS....
- 6) AS YOU CAN SEE FROM THIS NEXT PIC THE MATING SURFACE NEEDS A BIT OF CLEANING UP, MAKE SURE NONE OF THE GUFF GOES INTO THE FLYWHEEL HOUSING.



RE- FITTING IS THE REVERSE OF REMOVAL ...

IT TOOK ME A GOOD MINUTE TO REMEMBER HOW I GOT THE MOTOR OUT OF THE GAP. CLEAN UP THE FOUR BOLTS, APPLY A TINY DAB OF COPPER GREASE TO THE FIRST FEW THREADS OF EACH BOLT AND RE-ATTACH THE DEFLECTOR AND THE MOTOR. FINALLY RE-ATTACH THE MAIN LEAD AND THE SPADE CONNECTION AND RE-FIT THE RED SILICONE-RUBBER BOOT OVER THE MAIN CONNECTION AND THEN RECONNECT THE BATTERY.