

30352100

BMW V2



Sykes-Pickavant®

CONTENTS

	Page
1 Set Up Procedure	2
2 Procedure for Reading Codes	4
3 Procedure for Clearing Codes	5
4 Procedure for Driving Actuators	6
5 Procedure for Viewing Component Data	7
6 Procedure for Oil Reset	9
7 Procedure for Service Reset	10
8 Memory Function	11

Representation or reproduction of all or part of this document by whatever means without the prior written consent of the manufacturer or its legal representatives, is unlawful and constitutes an infringement of copyright. Printed in April 2003.

1 SET UP PROCEDURE

- Conditions:** 1 - Ignition off
2 - Connected to vehicle

2 LINE READER

SELF-TESTING
PLEASE WAIT...

4 LINE READER

SELF-TESTING
PLEASE WAIT...

Unit self-test

**AFTER VIEWING THE MODULE START UP SCREENS,
SELECT THE SYSTEM TYPE FITTED TO THE VEHICLE**

SELECT SYSTEM:
1) PETROL



SELECT SYSTEM:
2) DIESEL

OK

SELECT SYSTEM:
1) M 1.1

OK

Switch ignition on before confirming Selection

The following screens will be displayed if
screen information has been previously saved.

THERE ARE 15
SCREENS SAVED.
MEMORY FUNCTION
MENU TO FOLLOW <OK>

OK

1) VIEW SCREENS
2) CLEAR SCREENS
3) DOWNLOAD SCREENS
4) BOOKMARK

Press or **ESC**, this function will
be explained in detail in the
following pages

2 LINE READER

UNABLE TO ESTABLISH
DATA COMMUNICATIONS,
CHECK CONNECTIONS
AND RETRY <OK>

The Code Reader has made
communication with the ECU

SELECT FUNCTION
1) READ CODES

Read Codes
See P.4

OK

SELECT FUNCTION
2) CLEAR CODES

Clear Codes
See P.5

OK

SELECT FUNCTION
ACTUATORS

Actuators
See P.6

OK

SELECT FUNCTION
4) COMPONENTS

Components
See P.7

OK

4 LINE READER

SELECT SYSTEM:
1) PETROL
2) DIESEL
3) OIL RESET

OK

SELECT SYSTEM:
1) M 1.1
2) M 1.2
3) M 1.3

Switch ignition on before
confirming selection

OK

UNABLE TO ESTABLISH
DATA COMMUNICATIONS,
CHECK CONNECTIONS
AND RETRY <OK>

The Code Reader has made
communication with the ECU

SELECT FUNCTION:
1) READ CODES
2) CLEAR CODES
3) ACTUATORS
4) COMPONENTS

For Reading
Codes
See page 4

To select
another test see
pages
5,6,7,9

2 PROCEDURE FOR READING FAULT CODES

2 LINE READER

SELECT SYSTEM
1) READ CODES

OK



Other Choices
of test

READING TROUBLE
CODES...

Displays the number of fault codes

3 CODES READ
<OK> TO REVIEW

OK

29 SPEED SIGNAL,
INTERMITTENT.



Displays the following fault

15 ERROR LAMP,
PERMANENT.



Displays the following fault

33 FULL LOAD
SWITCH

SWITCH,
INTERMITTENT.

OK

Use OK
Button to
scroll
down
screen

4 LINE READER

SELECT SYSTEM
1) READ ERRORS
2) CLEAR ERRORS
3) ACTUATORS
4) COMPONENTS

OK

3 CODES READ
<OK> TO REVIEW

OK

--- 1 OF 3 ---
29 SPEED SIGNAL,
INTERMITTENT.



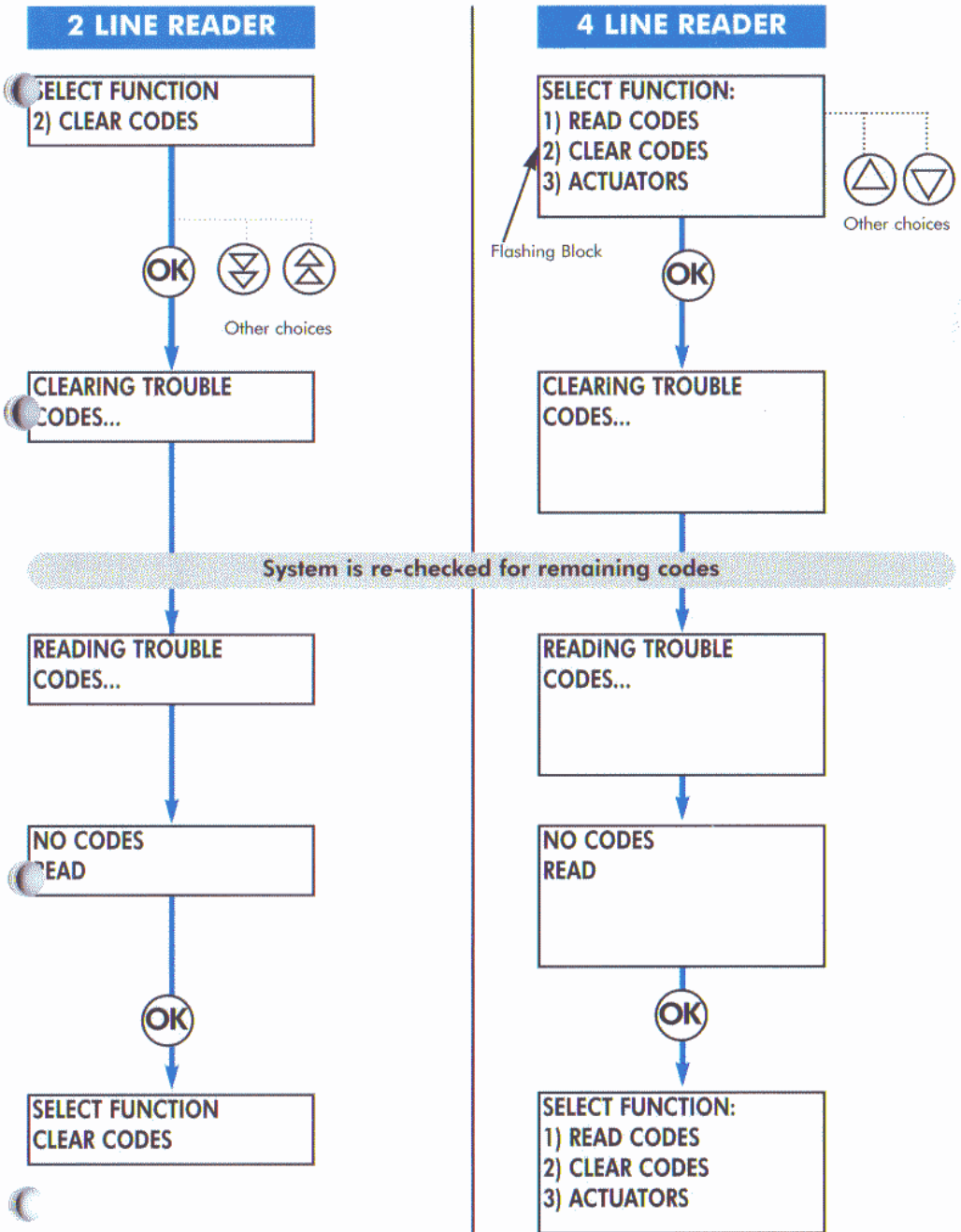
--- 2 OF 3 ---
15 ERROR LAMP,
PERMANENT.



--- 3 OF 3 ---
443 EVAPORATIVE
EMISSION CONTROL
SYSTEM.

END OF READ FAULT CODES PROCEDURE

3 PROCEDURE FOR CLEARING FAULT CODES



END OF CLEAR FAULT CODES PROCEDURE

4 PROCEDURE FOR DRIVING THE ACTUATORS

For these tests, the engine must be stopped with the ignition on

2 LINE READER

SELECT FUNCTION
3) ACTUATORS

OK

4 LINE READER

SELECT FUNCTION:
1) READ CODES
2) CLEAR CODES
3) ACTUATORS

OK

Flashing block



Injector actuation, Where a catalytic converter is present, the flow of petrol should be prevented by isolating the fuel pump prior to control.

SELECT ACTUATOR:
1) IDLE VALVE

OK

SELECT ACTUATOR:
1) IDLE VALVE
2) TANK VALVE
3) HEATER RELAY

OK

The Actuator Is Driven

DRIVING ACTUATORS

- [] -

DRIVING ACTUATORS

- [■ ■ ■ ■ ■ ■ ■ ■ ■ ■] -

SELECT ACTUATOR:
1) IDLE VALVE

ESC

Choice of other Actuators

DRIVING ACTUATORS

- [] -

DRIVING ACTUATORS

- [■ ■ ■ ■ ■ ■ ■ ■ ■ ■] -

SELECT ACTUATOR:
1) IDLE VALVE
2) TANK VALVE
3) HEATER RELAY

ESC

Choice of other Actuators

END OF PROCEDURE FOR VIEWING COMPONENT DATA

5 PROCEDURE FOR VIEWING COMPONENT DATA



Can be viewed Engine off or running - Ignition on

2 LINE READER

SELECT FUNCTION COMPONENTS



Display of Engine Speed

--ENGINE SPEED--
825 RPM



Display of Battery Voltage

-BATTERY VOLTAGE-
14.2 VOLTS



Display of Engine Temp

---E.C.T---
22.6 °C



Display of Inlet Air Temp

---I.A.T---
34.6 °C



4 LINE READER

- 1) READ CODES
- 2) CLEAR CODES
- 3) ACTUATORS
- 4) COMPONENTS



Flashing block

ENG. SPEED	: 825
BATTERY VOLTS	: 14.2
E.C.T.	: 22.6
I.A.T.	: 34.6

On pressing the **OK** key, a cursor appears on the first character of the first line indicating that this line can be modified. In order to select another line, press **OK** again. The cursor will then descend one line.



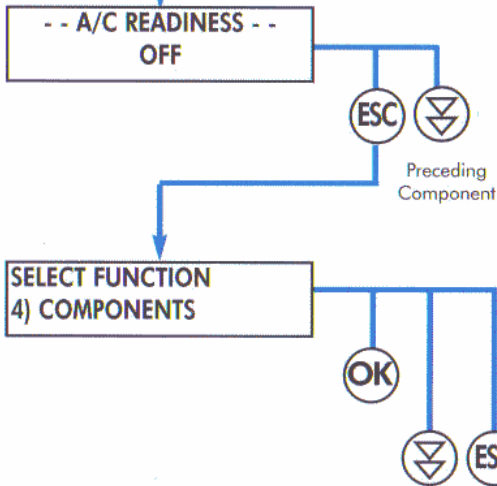
Flashing block

ENG. SPEED	: 825
BATTERY VOLTS	: 14.2
E.C.T.	: 22.6
I.A.T.	: 34.6

The line indicated by the cursor can display any component information presented by the ECU by pressing the keys or . The cursor disappears after 5 seconds in order to avoid restricting the view.

2 LINE READER

Display of A/C Readiness



4 LINE READER

On holding the **OK** button pressed for more than two seconds, a complementary screen of relevant help is displayed for 10 seconds

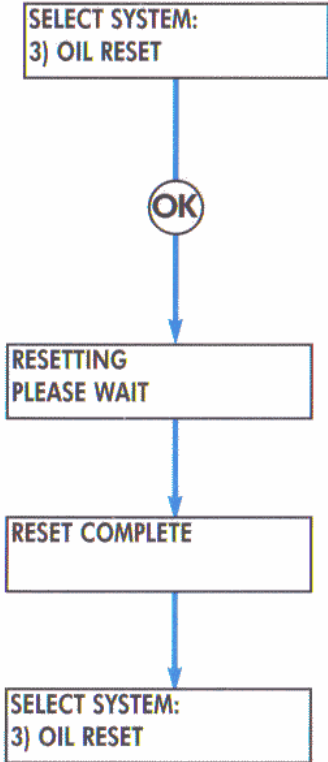
OK Press for 2 seconds

ENGINE SPEED (IN REVOLUTIONS PER MINUTE) - ACTUAL

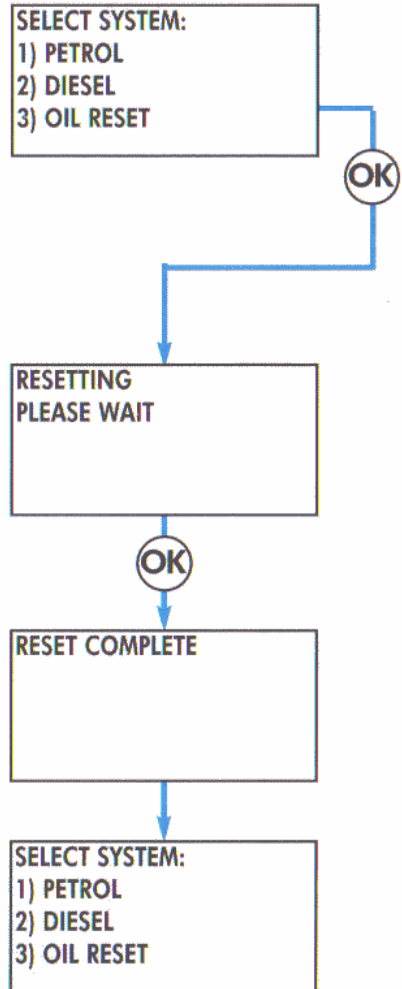
END OF PROCEDURE FOR VIEWING COMPONENT DATA

6 PROCEDURE FOR OIL RESET

2 LINE READER



4 LINE READER



END OF SERVICE RESET PROCEDURE

7 PROCEDURE FOR SERVICE RESET

2 LINE READER

SELECT SYSTEM:
4) SERVICE RESET

OK

SELECT SYSTEM:
SERVICE RESET

OK

RESETTING
PLEASE WAIT

RESET COMPLETE

SELECT SYSTEM
4) SERVICE RESET

4 LINE READER

SELECT SYSTEM
2) DIESEL
3) OIL RESET
4) SERVICE RESET

OK

RESETTING
PLEASE WAIT

OK

RESET COMPLETE

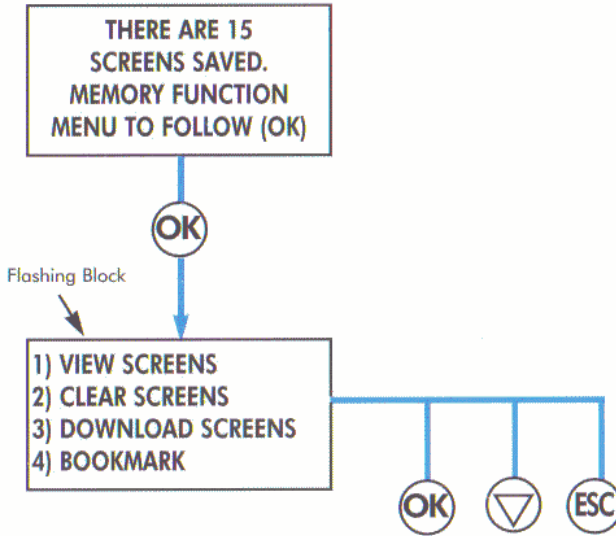
SELECT SYSTEM
2) DIESEL
3) OIL RESET
4) SERVICE RESET

END OF SERVICE RESET PROCEDURE

8 MEMORY FUNCTION WITH THE 4 LINE HANDSET







With this module, it is possible to save up to 100 screen shots of information within the memory function available on the 4 line handset. On connecting the unit the following message will be displayed **unless the memory function store is empty**.







Example: With 15 Previously saved screens.

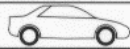













- 1/ VIEW SCREENS to scroll through the memorised screen shots with the aid of the up and down keys
- 2/ CLEAR SCREENS to entirely clear the memorised screens.
- 3/ DOWNLOAD SCREENS allows the saving and printing with the optional P.C connection kit.
- 4/ BOOKMARK. For each new test, it is possible to create a title page with a different number.

DO NOT REMOVE ANY MODULE FROM THE 4 LINE HANDSET WHILST IT IS STILL CONNECTED TO THE VEHICLE. IT IS ESSENTIAL TO DISCONNECT THE HARNESS PRIOR TO REMOVING THE MODULE TO PREVENT MEMORY FUNCTION FAILURE OR SUBSEQUENT UNIT DAMAGE.

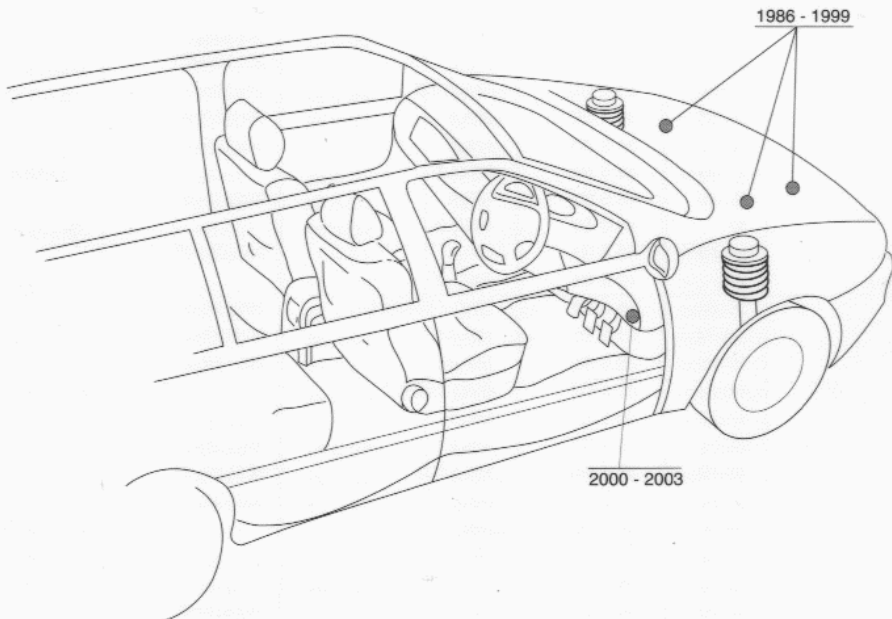
					
316ci	00-01	16 4 E3	BMS 46	302128v2	30214600
316i	88-91	16 4 E1	M1.3	302128v2*	
316i	90-94	16 4 E1	M1.7	302128v2*	
316i	91-	16 4 E2	M1.3	302128v2*	
316i	93-99	16 4 E2	M1.7.2/3	302128v2*	
316i	99-	16 4 E3	BMS 46	302128v2	30214600
316i	94-98	18 4 E1	M1.3/1.7	302128v2*	
316i	98-01	19 4 E1	BMS 46	302128v2	30214600
316i Compact	99-00	19 4 E1	BMS 46	302128v2	30214600
316i Touring	90-94	16 4 E1	M1.7	302128v2*	
318ci	99-01	19 4 E1	BMS 46	302128v2	30214600
318i	88-91	18 4 E1	M1.3/1.7	302128v2*	
318i	94-99	18 4 E2	M1.7.2/3	302128v2*	
318i	95-98	18 4 E2	BMS 43	302128v2	
318i	91-98	18 4 S1	M1.7	302128v2*	
318i	91-98	18 4 S1	M1.7.2/3	302128v2*	
318i	98-01	19 4 E1	BMS 46	302128v2	30214600
318i Cabriolet	95-98	18 4 E2	BMS 43	302128v2	
318i Cabriolet	91-98	18 4 S1	M1.7	302128v2*	
318i Cabriolet	91-98	18 4 S1	M1.7.2/3	302128v2*	
318i Compact	91-98	18 4 S1	M1.7	302128v2*	
318i Compact	91-98	18 4 S1	M1.7.2/3	302128v2*	
318i Coupe	91-98	18 4 S1	M1.7	302128v2*	
318i Coupe	91-98	18 4 S1	M1.7.2/3	302128v2*	
318i Touring	90-94	18 4 E1	M1.3/1.7	302128v2*	
318i Touring	95-99	18 4 E2	BMS 43	302128v2	
318i Touring	99-01	19 4 E1	BMS 46	302128v2	30214600
318tds	94-98	17 4 T1	EDC 1.2.3	302128v2*	
318tds	95-98	17 4 T1	MSA 11	302128v2	
318tds	94-99	17 4 T1	EDC 1.2.3/1.3.1	302128v2*	
318tds Compact	98-99	17 4 T1	EDC	302128v2	
318tds Compact	95-00	17 4 T1	EDC 1.2.3/1.3.1	302128v2*	
318tds Touring	95-99	17 4 T1	EDC	302128v2	
318tds Touring	94-99	17 4 T1	EDC 1.2.3/1.3.1	302128v2*	
320d	98-01	20 4 D1	EDC 15M	302128v2	
320d Touring	98-01	20 4 D1	EDC 15M	302128v2	
320i	91-	20 6 EE	M1.3	302128v2*	
320i	86-93	20 6 KA	M1.1	302128v2*	
320i	86-93	20 6 KA	M1.3	302128v2*	
320i	90-95	20 6 S1	M3.1	302128v2*	
320i	92-97	20 6 S2	M3.1	302128v2*	
320i	92-95	20 6 S2	MS 40	302128v2	
320i	94-98	20 6 S3	MS 41	302128v2	
320i	98-01	20 6 S4	MS 42	302128v2	
320i	98-01	20 6 S4	MS 42	302128v2	
320i Cabriolet	93-95	20 6 S2	MS 40	302128v2	
320i Cabriolet	94-98	20 6 S3	MS 41	302128v2	
320i Cabriolet	98-01	20 6 S4	MS 42	302128v2	
320i Coupe	92-95	20 6 S1	M3.1	302128v2*	
320i Coupe	92-95	20 6 S2	MS 40	302128v2	
320i Coupe	95-99	20 6 S3	MS 41	302128v2	
320i Coupe	98-01	20 6 S4	MS 42	302128v2	

					
320i Touring	95-99	20 6 S3	MS 41	302128v2	
320i Touring	98-01	20 6 S4	MS 42	302128v2	
323i	95-99	25 6 S3	MS 41	302128v2	
323i	98-00	25 6 S4	MS 42	302128v2	
323i Cabriolet	95-99	25 6 S3	MS 41	302128v2	
323i Cabriolet	98-00	25 6 S4	MS 42	302128v2	
323i Coupe	95-99	25 6 S3	MS 41	302128v2	
323i Coupe	98-00	25 6 S4	MS 42	302128v2	
323i Touring	95-99	25 6 S3	MS 41	302128v2	
323i Touring	98-00	25 6 S4	MS 42	302128v2	
324d	85-91	24 6 D	EDC 1.1.2/1.2.1	302128v2*	
324d	87-91	24 6 TB	EDC 1.1.2	302128v2*	
324d Touring	88-93	24 6 TB	EDC 1.1.2	302128v2*	
324tds	87-90	24 6 TB	EDC 1.1.2/1.2.1	302128v2*	
325i	91-94	25 6 K1	M1.3	302128v2*	
325i	91-95	25 6 S1	M3.1	302128v2*	
325i	91-95	25 6 S1	M3.3.1	302128v2*	
325i	00-01	25 6 S5	BMS 43	302128v2	30214600
325i Touring	91-94	25 6 K1	M1.3	302128v2*	
325td	93-	25 6 T1	EDC1.2.3	302128v2*	
325td	92-98	25 6 T1	EDC1.2.3	302128v2*	
325tds	93-	25 6 T1	EDC1.2.3	302128v2*	
325tds	93-98	25 6 T1	EDC1.2.3/1.3.1	302128v2*	
325tds	93-98	25 6 T1	EDC1.2.3/1.3.1	302128v2*	
325tds Touring	95-99	25 6 T1	EDC / MSA11	302128v2*	
325tds Touring	95-98	25 6 T1	EDC 1.2.3 / 1.3.1	302128v2*	
328i	95-99	25 6 S1	MS 41	302128v2	
328i	98-01	25 6 S2	MS 42	302128v2	
328i Cabriolet	95-99	25 6 S1	MS 41	302128v2	
328i Ci Coupe	98-01	25 6 S2	MS 42	302128v2	
328i Coupe	95-99	25 6 S1	MS 41	302128v2	
328i Touring	95-99	25 6 S1	MS 41	302128v2	
328i Touring	98-01	25 6 S2	MS 42	302128v2	
330d	00-02	30 6 D1	EDC 15C4		30214600
330d Touring	99-02	30 6 D1	EDC 15C4		30214600
518i	90-94	18 4 E1	M1.3/1.7	302128v2	
518i Touring	93-94	18 4 E1	M1.3/1.7	302128v2	
520d	00-02	20 4 D1	EDC 15M	302128v2	
520d Touring	00-02	20 4 D1	EDC 15M	302128v2	
520i	96-	20 6 EE	M1.3	302128v2*	
520i	88-90	20 6 KA	M1.3	302128v2*	
520i	90-94	20 6 S1	M3.1	302128v2*	
520i	91-96	20 6 S2	M3.1	302128v2*	
520i	94-96	20 6 S2	MS 40	302128v2	
520i	96-01	20 6 S3	MS 41	302128v2	
520i	98-01	20 6 S4	MS 42	302128v2	
520i	98-01	20 6 S4	MS 42	302128v2	
520i	98-01	20 6 S4	MS 42	302128v2	
520i Touring	91-96	20 6 S1	M3.1	302128v2*	
520i Touring	91-96	20 6 S2	MS 40	302128v2	
523i	96-98	25 6 S3	MS 41	302128v2	
523i	98-00	25 6 S4	MS 42	302128v2	

					
523i Touring	96-98	25 6 S3	MS 41	302128v2	
524td	87-88	24 6 TA	EDC 1.1.2	302128v2*	
524td	89-91	24 6 TB	EDC 1.1.2	302128v2*	
524td	87-91	24 6 TB	EDC 1.1.2	302128v2*	
525d	00-02	25 6 D1	EDC 15C4		30214600
525d Touring	00-02	25 6 D1	EDC 15C4		30214600
525i	88-90	25 6 K1	M1.3	302128v2*	
525i	89-92	25 6 S1	M3.1	302128v2*	
525i	89-92	25 6 S1	M3.3	302128v2*	
525i	92-95	25 6 S2	M3.1	302128v2*	
525i	00-02	25 6 S5	BMS 43	302128v2	30214600
525td	93-95	25 6 T1	EDC 1.2.3 / 1.3.1	302128v2*	
525td	97-00	25 6 T1	EDC / MSA11	302128v2	
525td Touring	93-96	25 6 T1	EDC 1.2.3 / 1.3.1	302128v2*	
525tds	93-	25 6 T1	EDC 1.2.3	302128v2*	
525tds	96-00	25 6 T1	EDC / MSA11	302128v2	
525tds	92-95	25 6 T1	EDC 1.2.3 / 1.3.1	302128v2*	
525tds Touring	97-00	25 6 T1	EDC / MSA11	302128v2	
525tds Touring	92-96	25 6 T1	EDC 1.2.3 / 1.3.1	302128v2*	
528i	96-98	28 6 S1	MS41	302128v2	
528i	98-01	28 6 S1	MS41	302128v2	
528i Touring	96-98	28 6 S1	MS41	302128v2	
528i Touring	98-01	28 6 S2	MS42	302128v2	
530d	98-	30 6 D1	EDC 15C4		30214600
530d Touring	98-	30 6 D1	EDC 15C4		30214600
530i	88-90	30 6 KA	M1.3	302128v2*	
530i	92-95	30 8 S1	M3.3	302128v2*	
530i Touring	92-95	30 8 S1	M3.3	302128v2*	
535i	88-93	34 6 EC	M1.1/1.3	302128v2*	
535i	88-93	34 6 EC	M1.3	302128v2*	
535i	88-92	34 6 KB	M1.3	302128v2*	
535i	97-02	35 8 S2	ME7.2		30214600
540i	92-95	40 8 S1	M3.3	302128v2*	
540i	97-	44 8 S2	ME7.2		30214600
540i Touring	93-95	40 8 S1	M3.3	302128v2*	
540i Touring	97-	40 8 S1	ME7.2		30214600
725tds	96-00	25 6 T1	EDC / MSA11	302128v2	
728i	95-98	28 6 S1	MS 41	302128v2	
728i	98-01	28 6 S2	MS 42	302128v2	
730d	98-01	30 6 D1	EDC 15C4		30214600
730i	87-93	30 6 KA	M1.3	302128v2*	
730i	91-94	30 8 S1	M3.3.1	302128v2*	
735i	86-92	34 6 EC	M1.1/1.3	302128v2*	
735i	87-92	34 6 KB	M1.3	302128v2*	
735i	98-02	35 8 S2	ME7.2		30214600
735il	98-02	35 8 S2	ME7.2		30214600
740d	98-01	39 8 D1	EDC 15C4		30214600
740i	91-95	40 8 S1	M3.3	302128v2*	
740i	91-95	40 8 S1	M3.3	302128v2*	
740i	97-01	44 8 S2	ME7.2		30214600
740il	97-01	44 8 S2	ME7.2		30214600

					
750i	88-94	50 12 A	M1.2	302128v2*	
840i	93-95	40 8 S1	M3.3	302128v2*	
850csi	92-96	56 12 1	M1.7	302128v2*	
850i	90-94	50 12 A	M1.2	302128v2*	
M3	92-95	30 6 S1	M3.3	302128v2*	
M3 Cabriolet	94-95	30 6 S1	M3.3	302128v2*	
M3 Coupe	94-96	30 6 S2	M3.3	302128v2*	
M5	90-94	36 6 S1	M3.1	302128v2*	
M5	92-96	38 6 S1	M3.3	302128v2*	
X5	99-02	44 8 S2	ME7.2		30214600
Z1	89-93	25 6 K1	M1.3	302128v2*	
Z3	95-98	18 4 E2	BMS 43	302128v2	30214600
Z3	98-	19 4 E1	BMS 46	302128v2	
Z3	99-01	20 6 S4	MS 42	302128v2	
Z3	98-00	25 6 S4	MS 42	302128v2	
Z3	97-99	28 6 S1	MS 41	302128v2	
Z3	98-01	28 6 S2	MS 42	302128v2	

* - 302128v2 - 30212800





Sykes-Pickavant

Churchbridge Works, Walsall Road, Cannock, Staffordshire, WS11 3JR, UK

Sales & Customer Service: + 44 (0)1922 702200

Export Enquiries: + 44 (0)1922 702250

Technical Enquiries: + 44 (0)1922 702222

Facsimile: + 44 (0)1922 702201

email: uk_sales@sptools.co.uk

www.sptools.co.uk

© Facom UK Limited 2003

303521LL BG42003