

Journal Bearings Selection

CONTENTS	PAGE
5.7 Journal Bearings Selection Chart.....	250
Bearings Selection Procedure.....	250
5.7.1 Crankshaft Journal Bearings	250
5.7.2 Balancer Shaft Journal Bearings.....	252
5.7.3 Connecting rod journal bearings	254

5.7 Journal Bearings Selection Chart

Bearings Selection Procedure

5.7.1 Crankshaft Journal Bearings

Crankshaft journal bearings selection chart (1.1)

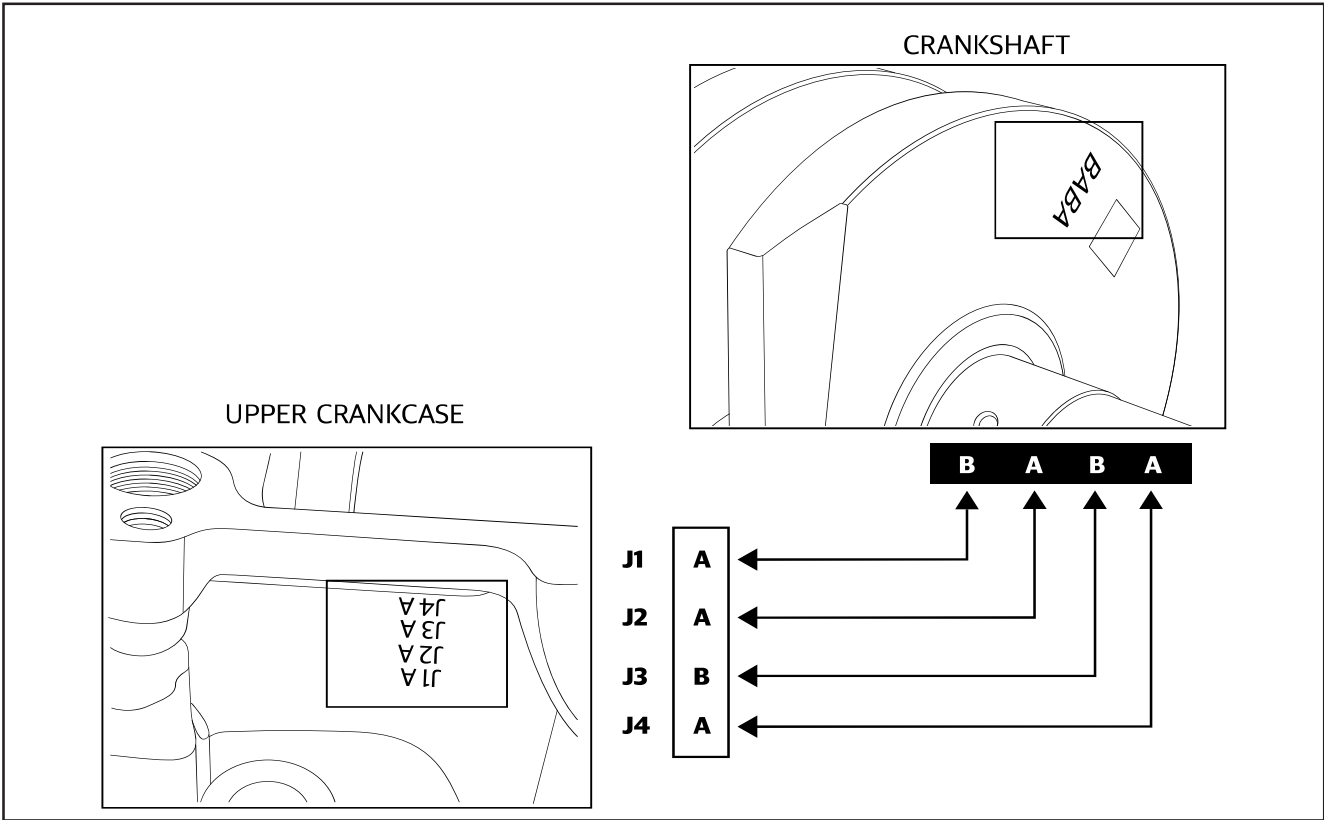
Crankcase	Crankshaft	Bearing code	Bearing color
A	A	CODE-1	Green
A	B	CODE-2	Black
A	C	CODE-3	Brown
B	A	CODE-2	Black
B	B	CODE-3	Brown
B	C	CODE-4	Yellow

NOTE

- Crankshaft punch mark will be with alphabets A, B, C punch mark only.
- Crankcase punch mark will be with alphabets A, B punch mark only.

Example:

The below sample illustration is only for explanation for selecting crankshaft journal bearing.



The alphabets punched on the upper crankcase should be correlated with the alphabets punched on the crankshaft web to arrive at the journal wise bearing selection of AA, AB, AC OR BA, BB, BC.

Based on the journal wise markings combination, the corresponding bearing kit (consisting of 2 journal bearings) code/colour should be selected by referring to the chart below as Code - 1, Code - 2, Code - 3, Code - 4.

Crankcase	Crankshaft	Bearing code	Bearing color
A	A	CODE-1	Green
A	B	CODE-2	Black
A	C	CODE-3	Brown
B	A	CODE-2	Black
B	B	CODE-3	Brown
B	C	CODE-4	Yellow

Hence, crankshaft journal bearing selection would be in the following order:

- Journal Bearing 1: Matching: AB, Bearing Code - 2 , Colour: Black
- Journal Bearing 2: Matching: AA, Bearing Code - 1 , Colour: Green
- Journal Bearing 3: Matching: BA, Bearing Code - 2 , Colour: Brown
- Journal Bearing 4: Matching: AA, Bearing Code - 1 , Colour: Green

⚠ CAUTION

- Ensure the journal bearing seating areas in the upper and lower crankcases are clean and dry.
- Ensure the bearings are correctly positioned and aligned before they are fixed into the crankcases.
- Do not interchange the journal bearings, they should be installed in their correct sequential order only.
- Do not use any tools while installing bearings as it may damage the bearings.
- Do not reuse journal bearings once they are removed from the crankcases.

5.7.2 Balancer Shaft Journal Bearings

Balancer shaft journal bearing selection chart (1.2)

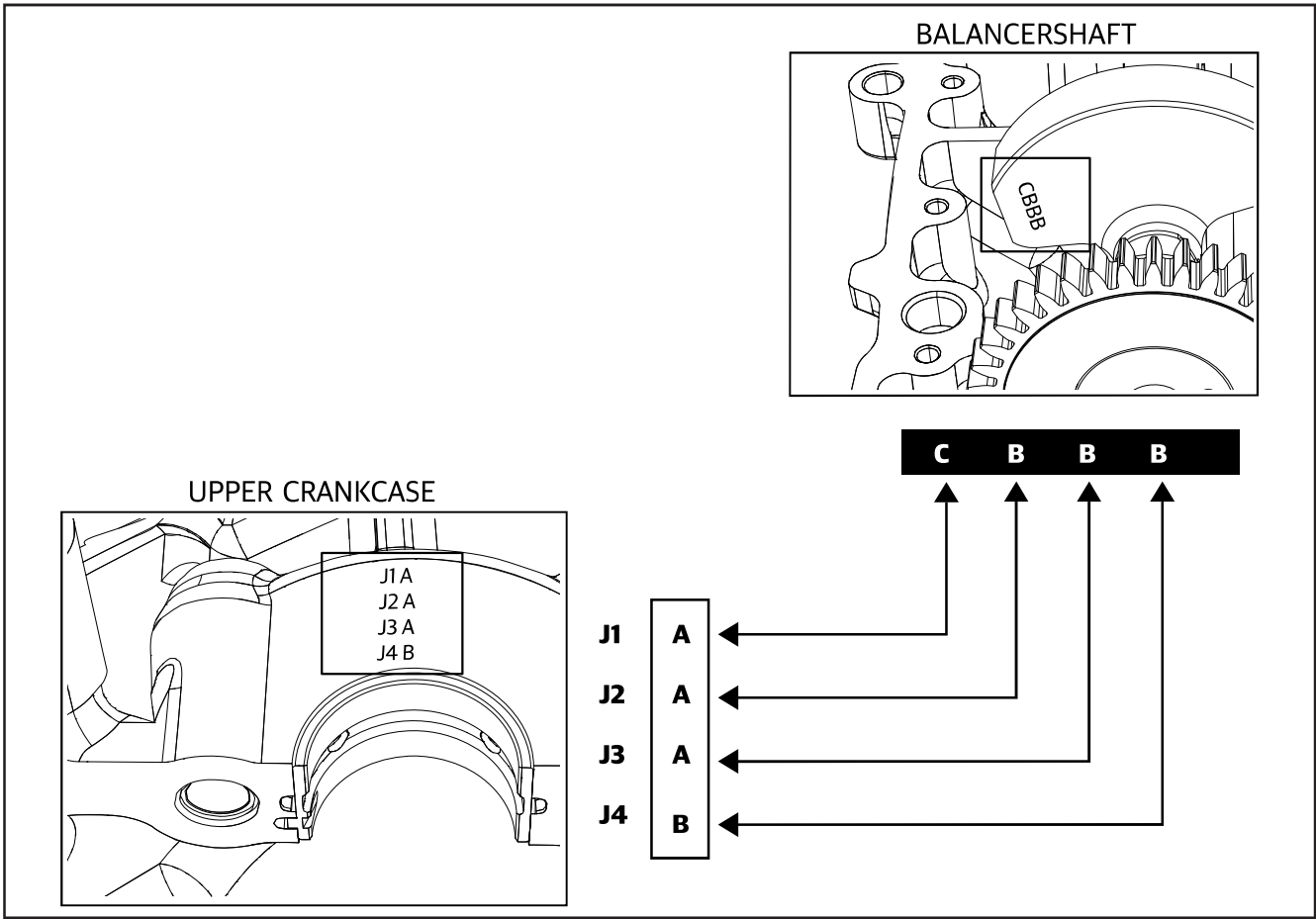
Crankcase	Balancer Shaft	Bearing code	Bearing color
A	A	CODE-1	Green
A	B	CODE-2	Black
A	C	CODE-3	Brown
B	A	CODE-2	Black
B	B	CODE-3	Brown
B	C	CODE-4	Yellow

NOTE

- Balancer shaft punch mark will be with alphabets A, B, C punch mark only.
- Crankcase punch mark will be with alphabets A, B punch mark only.

Example:

The below sample illustration is only for explanation for selecting balancer-shaft journal bearing.

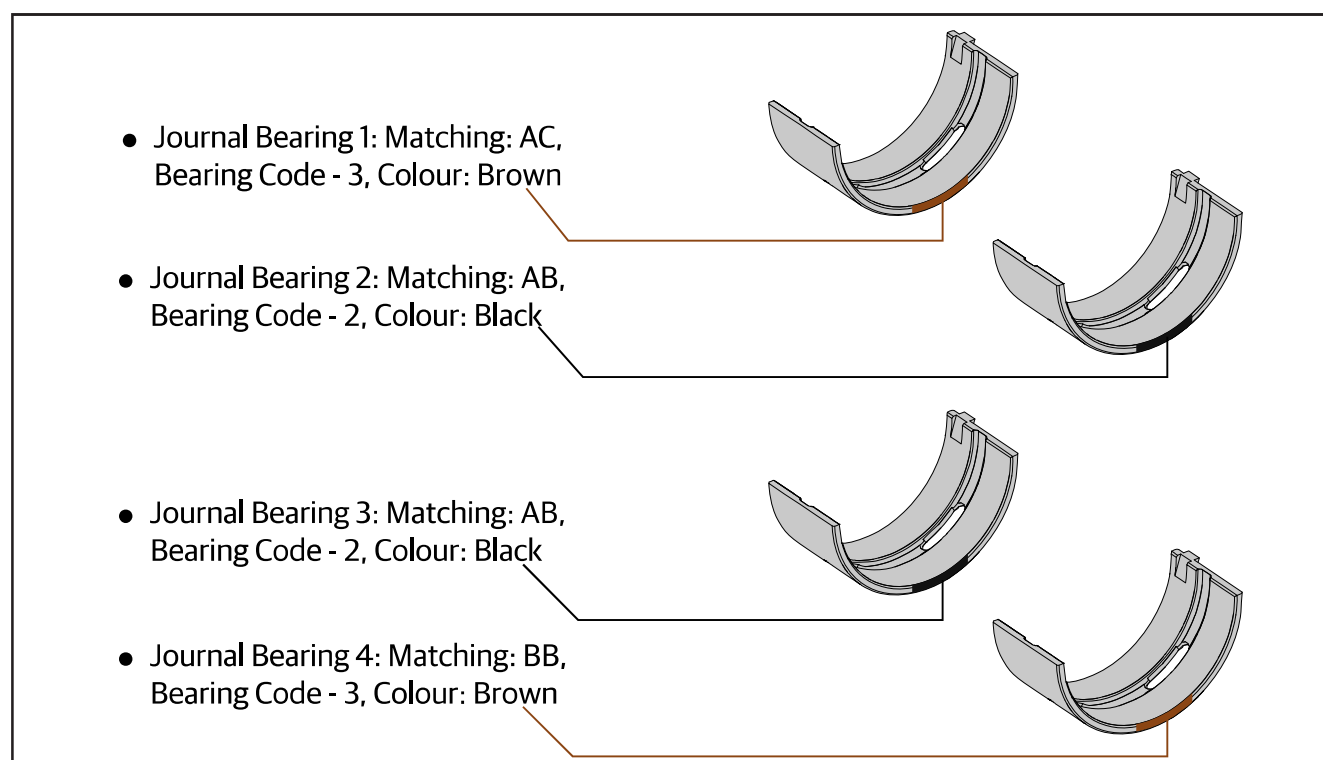


The alphabets punched on the upper crankcase should be correlated with the alphabets punched on the balancer shaft web to arrive at the journal wise bearing selection of AA, AB, AC or BA, BB, BC.

Based on the journal wise markings combination, the corresponding bearing kit (consisting of 2 journal bearings) code/colour should be selected by referring to the chart below as Code - 1, Code - 2, Code - 3, Code - 4.

Crankcase	Balancer Shaft	Bearing code	Bearing color
A	A	CODE-1	Green
A	B	CODE-2	Black
A	C	CODE-3	Brown
B	A	CODE-2	Black
B	B	CODE-3	Brown
B	C	CODE-4	Yellow

Hence, balancer shaft journal beari



⚠ CAUTION

- Ensure the journal bearing seating areas in the upper and lower crankcases are clean and dry.
- Ensure the bearings are correctly positioned and aligned before they are fixed into the crankcases.
- Do not interchange the journal bearings, they should be installed in their correct sequential order only.
- Do not use any tools while installing bearings as it may damage the bearings.
- Do not reuse journal bearings once they are removed from the crankcases.

5.7.3 Connecting rod journal bearings

Connecting rod journal bearings selection chart (1.3)

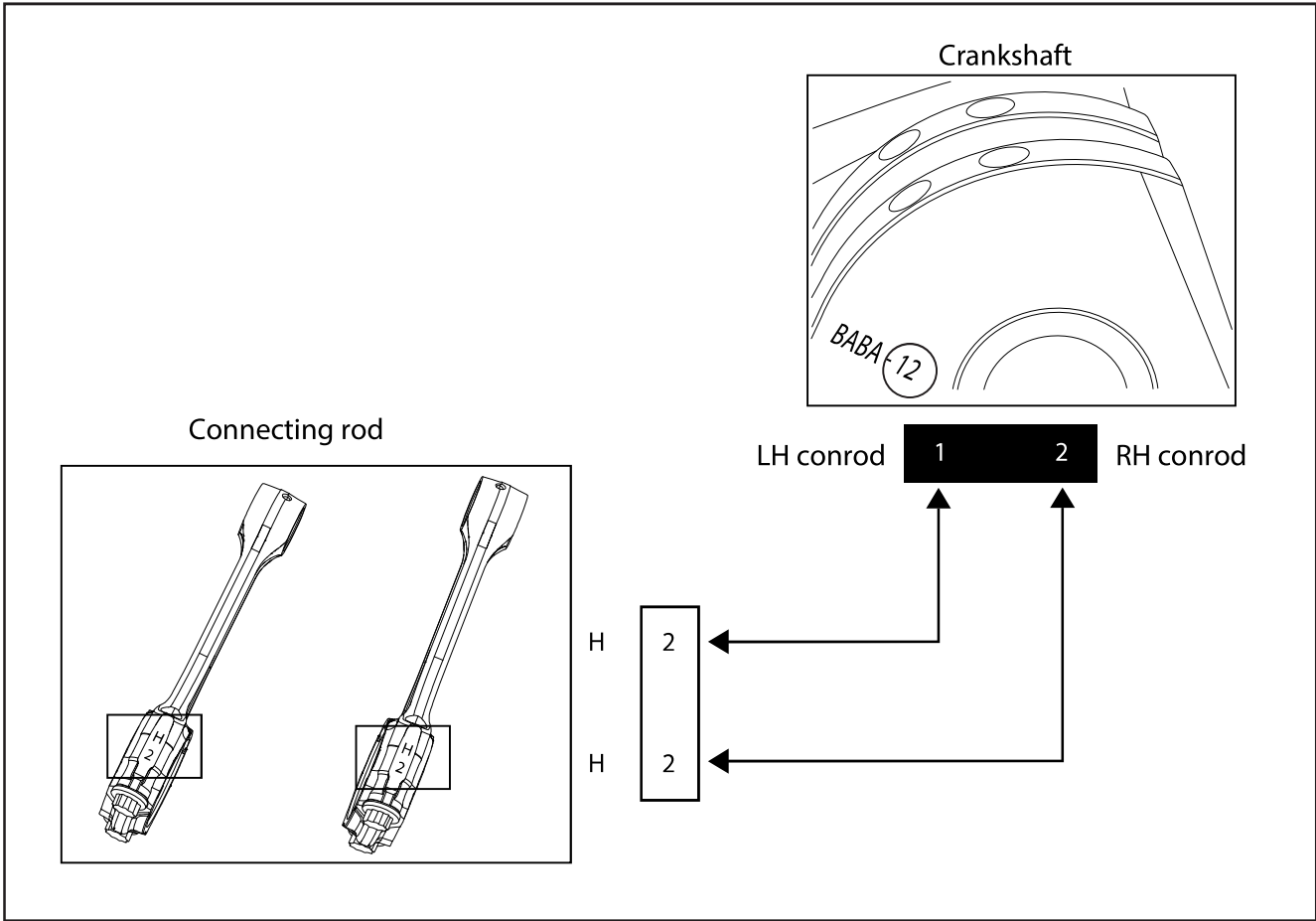
Connecting rod	Crankshaft	Bearing code	Bearing Color
1	1	CODE-1	Green
1	2	CODE-2	Black
2	1	CODE-2	Black
2	2	CODE-3	Brown

NOTE

- Crankshaft punch mark will be with numerics 1 & 2 only.
- Connecting rod punch mark will be with numerics containing 1 & 2 mark only.

Example:

The below sample illustration is only for explanation for selecting connecting rod journal bearing.



The connecting rod punch mark should be matched with crankshaft numeric punch mark and then the bearing can be selected by referring chart (1.3). Thus the bearing would be Code-2, Code-3

Connecting rod	Crankshaft	Bearing code	Bearing Color
1	1	CODE-1	Green
1	2	CODE-2	Black
2	1	CODE-2	Black
2	2	CODE-3	Brown

Hence connecting rod bearing would be in the following order

- Connecting rod LH: Matching: 21, Bearing Code - 2, Colour: Black
- Connecting rod RH: Matching: 22, Bearing Code - 3 Colour: Brown

⚠ CAUTION

Ensure the journal bearing seating areas in the connecting rod and connecting rod cup are clean and dry.

Ensure the bearings are correctly positioned and aligned before they are fixed into the connecting rod and connecting rod cup.

Do not interchange the bearings. They should be installed in their correct order only.

Do not use any tools to install the bearings in the connecting rods/connecting rod cups as it may damage the bearings.

Do not reuse the bearings once they are removed from the connecting rods/connecting rod cups.