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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|---------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-------------------------------------------------|---------------------------------------|---------------------------------------------------|-------------------------|-------------------------|---|-----------------|---------------------|------------------|----------------------|---|---------------------------------------------|------------------------------|--------------------------------|---------------------------------------|---|----------|-----------------|--------------------|------------------|---|------------|--------------|------------------|----------------|
| <b>Anziehvorschrift für Zylinderkopf</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                             | <b>818.593</b>                                                            | <br>Das Original |                                                 |                                       |                                                   |                         |                         |   |                 |                     |                  |                      |   |                                             |                              |                                |                                       |   |          |                 |                    |                  |   |            |              |                  |                |
| <b>Tightening Instructions for Cylinder Head</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                             | passend für / suitable for<br>adaptable à / adaptable a<br><br><b>BMW</b> |                                                                                                   |                                                 |                                       |                                                   |                         |                         |   |                 |                     |                  |                      |   |                                             |                              |                                |                                       |   |          |                 |                    |                  |   |            |              |                  |                |
| <b>Instructions de serrage pour culasse</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                             |                                                                           |                                                                                                   |                                                 |                                       |                                                   |                         |                         |   |                 |                     |                  |                      |   |                                             |                              |                                |                                       |   |          |                 |                    |                  |   |            |              |                  |                |
| <b>Prescripciones de apriete para culatas</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                             |                                                                           |                                                                                                   |                                                 |                                       |                                                   |                         |                         |   |                 |                     |                  |                      |   |                                             |                              |                                |                                       |   |          |                 |                    |                  |   |            |              |                  |                |
| Schraubenkopf / Head shape<br>Tête de vis / Cabeza de tornillo                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                             | Anziehreihenfolge/Tightening sequence/Ordre de serrage/Orden de apriete   |                                                                                                   |                                                 |                                       |                                                   |                         |                         |   |                 |                     |                  |                      |   |                                             |                              |                                |                                       |   |          |                 |                    |                  |   |            |              |                  |                |
| <div><div><div>12</div><div>10</div><div>4</div><div>2</div><div>6</div><div>8</div><div>14</div><div>13</div><div>7</div><div>5</div><div>1</div><div>3</div><div>9</div><div>11</div></div></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                             |                                                                           |                                                                                                   |                                                 |                                       |                                                   |                         |                         |   |                 |                     |                  |                      |   |                                             |                              |                                |                                       |   |          |                 |                    |                  |   |            |              |                  |                |
| <table><tr><td>Anziehen/<br/>Tightening/<br/>Serrage/<br/>Apriete</td><td>*<br/><br/>●</td><td>48 - 52 Nm<br/>78 - 82 Nm<br/>15 min<br/>98 - 102 Nm</td></tr></table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                             |                                                                           |                                                                                                   | Anziehen/<br>Tightening/<br>Serrage/<br>Apriete | *<br><br>●                            | 48 - 52 Nm<br>78 - 82 Nm<br>15 min<br>98 - 102 Nm |                         |                         |   |                 |                     |                  |                      |   |                                             |                              |                                |                                       |   |          |                 |                    |                  |   |            |              |                  |                |
| Anziehen/<br>Tightening/<br>Serrage/<br>Apriete                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | *<br><br>●                                  | 48 - 52 Nm<br>78 - 82 Nm<br>15 min<br>98 - 102 Nm                         |                                                                                                   |                                                 |                                       |                                                   |                         |                         |   |                 |                     |                  |                      |   |                                             |                              |                                |                                       |   |          |                 |                    |                  |   |            |              |                  |                |
| Zeichenerklärung / Explanations / Explication / Explicacion                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                             |                                                                           |                                                                                                   |                                                 |                                       |                                                   |                         |                         |   |                 |                     |                  |                      |   |                                             |                              |                                |                                       |   |          |                 |                    |                  |   |            |              |                  |                |
| <table><tr><td>✱</td><td>neue Zylinderkopf-schrauben verwenden</td><td>use new cylinder head bolts</td><td>utiliser des vis neuves</td><td>emplar tornillos nuevos</td></tr><tr><td>★</td><td>Warmlauf (80°C)</td><td>warm up time (80°C)</td><td>chauffage (80°C)</td><td>calentamiento (80°C)</td></tr><tr><td>□</td><td>Schrauben einzeln lösen und wieder anziehen</td><td>loosen and tighten each bolt</td><td>deserrer et serrer vis par vis</td><td>aflojar y apretar tornillo a tornillo</td></tr><tr><td>●</td><td>Setzzeit</td><td>relaxation time</td><td>durée de tassement</td><td>tiempo de espera</td></tr><tr><td>➤</td><td>Drehwinkel</td><td>torque angle</td><td>angle de serrage</td><td>ángulo de giro</td></tr></table> |                                             |                                                                           |                                                                                                   | ✱                                               | neue Zylinderkopf-schrauben verwenden | use new cylinder head bolts                       | utiliser des vis neuves | emplar tornillos nuevos | ★ | Warmlauf (80°C) | warm up time (80°C) | chauffage (80°C) | calentamiento (80°C) | □ | Schrauben einzeln lösen und wieder anziehen | loosen and tighten each bolt | deserrer et serrer vis par vis | aflojar y apretar tornillo a tornillo | ● | Setzzeit | relaxation time | durée de tassement | tiempo de espera | ➤ | Drehwinkel | torque angle | angle de serrage | ángulo de giro |
| ✱                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | neue Zylinderkopf-schrauben verwenden       | use new cylinder head bolts                                               | utiliser des vis neuves                                                                           | emplar tornillos nuevos                         |                                       |                                                   |                         |                         |   |                 |                     |                  |                      |   |                                             |                              |                                |                                       |   |          |                 |                    |                  |   |            |              |                  |                |
| ★                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Warmlauf (80°C)                             | warm up time (80°C)                                                       | chauffage (80°C)                                                                                  | calentamiento (80°C)                            |                                       |                                                   |                         |                         |   |                 |                     |                  |                      |   |                                             |                              |                                |                                       |   |          |                 |                    |                  |   |            |              |                  |                |
| □                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Schrauben einzeln lösen und wieder anziehen | loosen and tighten each bolt                                              | deserrer et serrer vis par vis                                                                    | aflojar y apretar tornillo a tornillo           |                                       |                                                   |                         |                         |   |                 |                     |                  |                      |   |                                             |                              |                                |                                       |   |          |                 |                    |                  |   |            |              |                  |                |
| ●                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Setzzeit                                    | relaxation time                                                           | durée de tassement                                                                                | tiempo de espera                                |                                       |                                                   |                         |                         |   |                 |                     |                  |                      |   |                                             |                              |                                |                                       |   |          |                 |                    |                  |   |            |              |                  |                |
| ➤                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Drehwinkel                                  | torque angle                                                              | angle de serrage                                                                                  | ángulo de giro                                  |                                       |                                                   |                         |                         |   |                 |                     |                  |                      |   |                                             |                              |                                |                                       |   |          |                 |                    |                  |   |            |              |                  |                |
| <b>Motortyp / Engine type / Type de moteur / Tipo de motor</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                             |                                                                           |                                                                                                   |                                                 |                                       |                                                   |                         |                         |   |                 |                     |                  |                      |   |                                             |                              |                                |                                       |   |          |                 |                    |                  |   |            |              |                  |                |
| Mot. S 38 24 V, 6 Cyl., 3,5 l<br>210 kW (286 PS), 1985>1988<br>3,6 l, 232 kW (315 PS), 1988><br>S 38 24 V, 3, 5 l, 191/210 kW (260/286 PS)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                             |                                                                           |                                                                                                   |                                                 |                                       |                                                   |                         |                         |   |                 |                     |                  |                      |   |                                             |                              |                                |                                       |   |          |                 |                    |                  |   |            |              |                  |                |
| ElringKlinger AG, Max-Eyth-Str.2<br>72581 Dettingen / Erms. Tel. 07123/724 601                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                             | <b>*818.593*</b>                                                          |                                                                                                   |                                                 |                                       |                                                   |                         |                         |   |                 |                     |                  |                      |   |                                             |                              |                                |                                       |   |          |                 |                    |                  |   |            |              |                  |                |