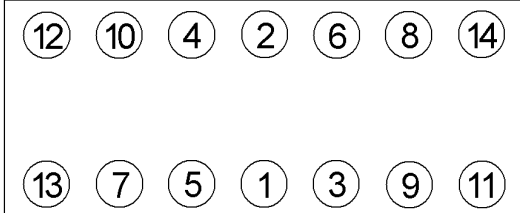


|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                             |                                                                                             |                                                                                                          |                                                 |                                       |                             |                         |                         |   |                 |                     |                  |                      |   |                                             |                              |                                |                                       |   |          |                 |                    |                  |   |            |              |                  |                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|-------------------------------------------------|---------------------------------------|-----------------------------|-------------------------|-------------------------|---|-----------------|---------------------|------------------|----------------------|---|---------------------------------------------|------------------------------|--------------------------------|---------------------------------------|---|----------|-----------------|--------------------|------------------|---|------------|--------------|------------------|----------------|
| <b>Anziehvorschrift für Zylinderkopf</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                             | <b>442.180</b><br>passend für / suitable for<br>adaptable à / adaptable a<br><br><b>BMW</b> | <br><b>Das Original</b> |                                                 |                                       |                             |                         |                         |   |                 |                     |                  |                      |   |                                             |                              |                                |                                       |   |          |                 |                    |                  |   |            |              |                  |                |
| <b>Tightening Instructions for Cylinder Head</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                     |                                                                                                          |                                                 |                                       |                             |                         |                         |   |                 |                     |                  |                      |   |                                             |                              |                                |                                       |   |          |                 |                    |                  |   |            |              |                  |                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                             |            |                                                                                                          |                                                 |                                       |                             |                         |                         |   |                 |                     |                  |                      |   |                                             |                              |                                |                                       |   |          |                 |                    |                  |   |            |              |                  |                |
| 198.740<br>M10 x 110 x 1,5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                             |                                                                                             |                                                                                                          |                                                 |                                       |                             |                         |                         |   |                 |                     |                  |                      |   |                                             |                              |                                |                                       |   |          |                 |                    |                  |   |            |              |                  |                |
| <table><tr><td>Anziehen/<br/>Tightening/<br/>Serrage/<br/>Apriete</td><td>*<br/>➤<br/>➤</td><td>30 Nm<br/>60°<br/>60°</td></tr></table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                             |                                                                                             |                                                                                                          | Anziehen/<br>Tightening/<br>Serrage/<br>Apriete | *<br>➤<br>➤                           | 30 Nm<br>60°<br>60°         |                         |                         |   |                 |                     |                  |                      |   |                                             |                              |                                |                                       |   |          |                 |                    |                  |   |            |              |                  |                |
| Anziehen/<br>Tightening/<br>Serrage/<br>Apriete                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | *<br>➤<br>➤                                 | 30 Nm<br>60°<br>60°                                                                         |                                                                                                          |                                                 |                                       |                             |                         |                         |   |                 |                     |                  |                      |   |                                             |                              |                                |                                       |   |          |                 |                    |                  |   |            |              |                  |                |
| <b>Zeichenerklärung / Explanations / Explication / Explicacion</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                             |                                                                                             |                                                                                                          |                                                 |                                       |                             |                         |                         |   |                 |                     |                  |                      |   |                                             |                              |                                |                                       |   |          |                 |                    |                  |   |            |              |                  |                |
| <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. M73/ M73N B54                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                             |                                                                                             |                                                                                                          |                                                 |                                       |                             |                         |                         |   |                 |                     |                  |                      |   |                                             |                              |                                |                                       |   |          |                 |                    |                  |   |            |              |                  |                |
| E38 750i, iL<br>E31 850Ci                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                             |                                                                                             |                                                                                                          |                                                 |                                       |                             |                         |                         |   |                 |                     |                  |                      |   |                                             |                              |                                |                                       |   |          |                 |                    |                  |   |            |              |                  |                |
| Cyl. 7-12<br>✱ 1,5mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                             |                                                                                             |                                                                                                          |                                                 |                                       |                             |                         |                         |   |                 |                     |                  |                      |   |                                             |                              |                                |                                       |   |          |                 |                    |                  |   |            |              |                  |                |
| ElringKlinger AG, Max-Eyth-Str.2<br>72581 Dettingen / Erms. Tel. 07123/724 601                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                             | <b>*442.180*</b>                                                                            |                                                                                                          |                                                 |                                       |                             |                         |                         |   |                 |                     |                  |                      |   |                                             |                              |                                |                                       |   |          |                 |                    |                  |   |            |              |                  |                |