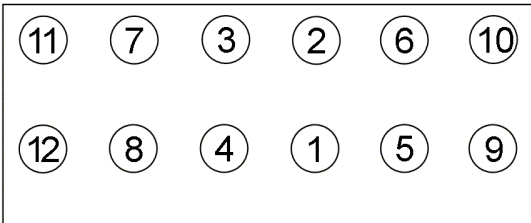


|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                |                                                                                   |                                                                                                   |                                                 |                                           |                                |                            |                         |   |                 |                     |                  |                      |   |                                                |                                 |                                   |                                          |   |          |                 |                    |                  |   |            |              |                  |                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-------------------------------------------------|-------------------------------------------|--------------------------------|----------------------------|-------------------------|---|-----------------|---------------------|------------------|----------------------|---|------------------------------------------------|---------------------------------|-----------------------------------|------------------------------------------|---|----------|-----------------|--------------------|------------------|---|------------|--------------|------------------|----------------|
| Anziehvorschrift für Zylinderkopf                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                | 451.457                                                                           | <br>Das Original |                                                 |                                           |                                |                            |                         |   |                 |                     |                  |                      |   |                                                |                                 |                                   |                                          |   |          |                 |                    |                  |   |            |              |                  |                |
| Tightening Instructions for Cylinder Head                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                | passend für / suitable for<br>adaptable à / adaptable a<br><br>Volvo              |                                                                                                   |                                                 |                                           |                                |                            |                         |   |                 |                     |                  |                      |   |                                                |                                 |                                   |                                          |   |          |                 |                    |                  |   |            |              |                  |                |
| Instructions de serrage pour culasse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                |                                                                                   |                                                                                                   |                                                 |                                           |                                |                            |                         |   |                 |                     |                  |                      |   |                                                |                                 |                                   |                                          |   |          |                 |                    |                  |   |            |              |                  |                |
| Prescripciones de apriete para culatas                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                |                                                                                   |                                                                                                   |                                                 |                                           |                                |                            |                         |   |                 |                     |                  |                      |   |                                                |                                 |                                   |                                          |   |          |                 |                    |                  |   |            |              |                  |                |
| Schraubenkopf / Head shape<br>Tête de vis / Cabeza de tornillo                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                | Anziehreihenfolge/Tightening sequence/Ordre de serrage/Orden de apriete           |                                                                                                   |                                                 |                                           |                                |                            |                         |   |                 |                     |                  |                      |   |                                                |                                 |                                   |                                          |   |          |                 |                    |                  |   |            |              |                  |                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                |  |                                                                                                   |                                                 |                                           |                                |                            |                         |   |                 |                     |                  |                      |   |                                                |                                 |                                   |                                          |   |          |                 |                    |                  |   |            |              |                  |                |
| 477.940<br>M 12x1,75x197                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                |                                                                                   |                                                                                                   |                                                 |                                           |                                |                            |                         |   |                 |                     |                  |                      |   |                                                |                                 |                                   |                                          |   |          |                 |                    |                  |   |            |              |                  |                |
| <table><tr><td>Anziehen/<br/>Tightening/<br/>Serrage/<br/>Apriete</td><td>*<br/><br/>➤<br/>➤</td><td>20 Nm<br/>50 Nm<br/>120°<br/>120°</td></tr></table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                |                                                                                   |                                                                                                   | Anziehen/<br>Tightening/<br>Serrage/<br>Apriete | *<br><br>➤<br>➤                           | 20 Nm<br>50 Nm<br>120°<br>120° |                            |                         |   |                 |                     |                  |                      |   |                                                |                                 |                                   |                                          |   |          |                 |                    |                  |   |            |              |                  |                |
| Anziehen/<br>Tightening/<br>Serrage/<br>Apriete                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | *<br><br>➤<br>➤                                | 20 Nm<br>50 Nm<br>120°<br>120°                                                    |                                                                                                   |                                                 |                                           |                                |                            |                         |   |                 |                     |                  |                      |   |                                                |                                 |                                   |                                          |   |          |                 |                    |                  |   |            |              |                  |                |
| Zeichenerklärung / Explanations / Explication / Explicacion                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                |                                                                                   |                                                                                                   |                                                 |                                           |                                |                            |                         |   |                 |                     |                  |                      |   |                                                |                                 |                                   |                                          |   |          |                 |                    |                  |   |            |              |                  |                |
| <table><tr><td>✱</td><td>neue Zylinderkopf-<br/>schrauben verwenden</td><td>use new cylinder<br/>head bolts</td><td>utiliser des vis<br/>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<br/>und wieder anziehen</td><td>loosen and tighten<br/>each bolt</td><td>deserrer et serrer<br/>vis par vis</td><td>aflojar y apretar<br/>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-<br>schrauben verwenden | use new cylinder<br>head bolts | utiliser des vis<br>neuves | emplar tornillos nuevos | ★ | Warmlauf (80°C) | warm up time (80°C) | chauffage (80°C) | calentamiento (80°C) | □ | Schrauben einzeln lösen<br>und wieder anziehen | loosen and tighten<br>each bolt | deserrer et serrer<br>vis par vis | aflojar y apretar<br>tornillo a tornillo | ● | Setzzeit | relaxation time | durée de tassement | tiempo de espera | ➤ | Drehwinkel | torque angle | angle de serrage | ángulo de giro |
| ✱                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | neue Zylinderkopf-<br>schrauben verwenden      | use new cylinder<br>head bolts                                                    | utiliser des vis<br>neuves                                                                        | emplar tornillos nuevos                         |                                           |                                |                            |                         |   |                 |                     |                  |                      |   |                                                |                                 |                                   |                                          |   |          |                 |                    |                  |   |            |              |                  |                |
| ★                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Warmlauf (80°C)                                | warm up time (80°C)                                                               | chauffage (80°C)                                                                                  | calentamiento (80°C)                            |                                           |                                |                            |                         |   |                 |                     |                  |                      |   |                                                |                                 |                                   |                                          |   |          |                 |                    |                  |   |            |              |                  |                |
| □                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Schrauben einzeln lösen<br>und wieder anziehen | loosen and tighten<br>each bolt                                                   | deserrer et serrer<br>vis par vis                                                                 | aflojar y apretar<br>tornillo a tornillo        |                                           |                                |                            |                         |   |                 |                     |                  |                      |   |                                                |                                 |                                   |                                          |   |          |                 |                    |                  |   |            |              |                  |                |
| ●                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Setzzeit                                       | relaxation time                                                                   | durée de tassement                                                                                | tiempo de espera                                |                                           |                                |                            |                         |   |                 |                     |                  |                      |   |                                                |                                 |                                   |                                          |   |          |                 |                    |                  |   |            |              |                  |                |
| ➤                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Drehwinkel                                     | torque angle                                                                      | angle de serrage                                                                                  | ángulo de giro                                  |                                           |                                |                            |                         |   |                 |                     |                  |                      |   |                                                |                                 |                                   |                                          |   |          |                 |                    |                  |   |            |              |                  |                |
| Motortyp / Engine type / Type de moteur / Tipo de motor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                |                                                                                   |                                                                                                   |                                                 |                                           |                                |                            |                         |   |                 |                     |                  |                      |   |                                                |                                 |                                   |                                          |   |          |                 |                    |                  |   |            |              |                  |                |
| 2,4 ltr / Ø 82,3 mm / t = 1,15 mm<br>Volvo<br>D5244T10/11/12/15/16/17/20/21/22/23<br>S60/S80/V60/V70/XC60                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                |                                                                                   |                                                                                                   |                                                 |                                           |                                |                            |                         |   |                 |                     |                  |                      |   |                                                |                                 |                                   |                                          |   |          |                 |                    |                  |   |            |              |                  |                |
| ElringKlinger AG, Max-Eyth-Str.2<br>72581 Dettingen / Erms. Tel. 07123/724 601                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                | *451.457*                                                                         |                                                                                                   |                                                 |                                           |                                |                            |                         |   |                 |                     |                  |                      |   |                                                |                                 |                                   |                                          |   |          |                 |                    |                  |   |            |              |                  |                |