

*Hanomag*

**H104**

**C A T A L O G O  
D E M O T O R**



 **INDUSTRIA  
ARGENTINA**

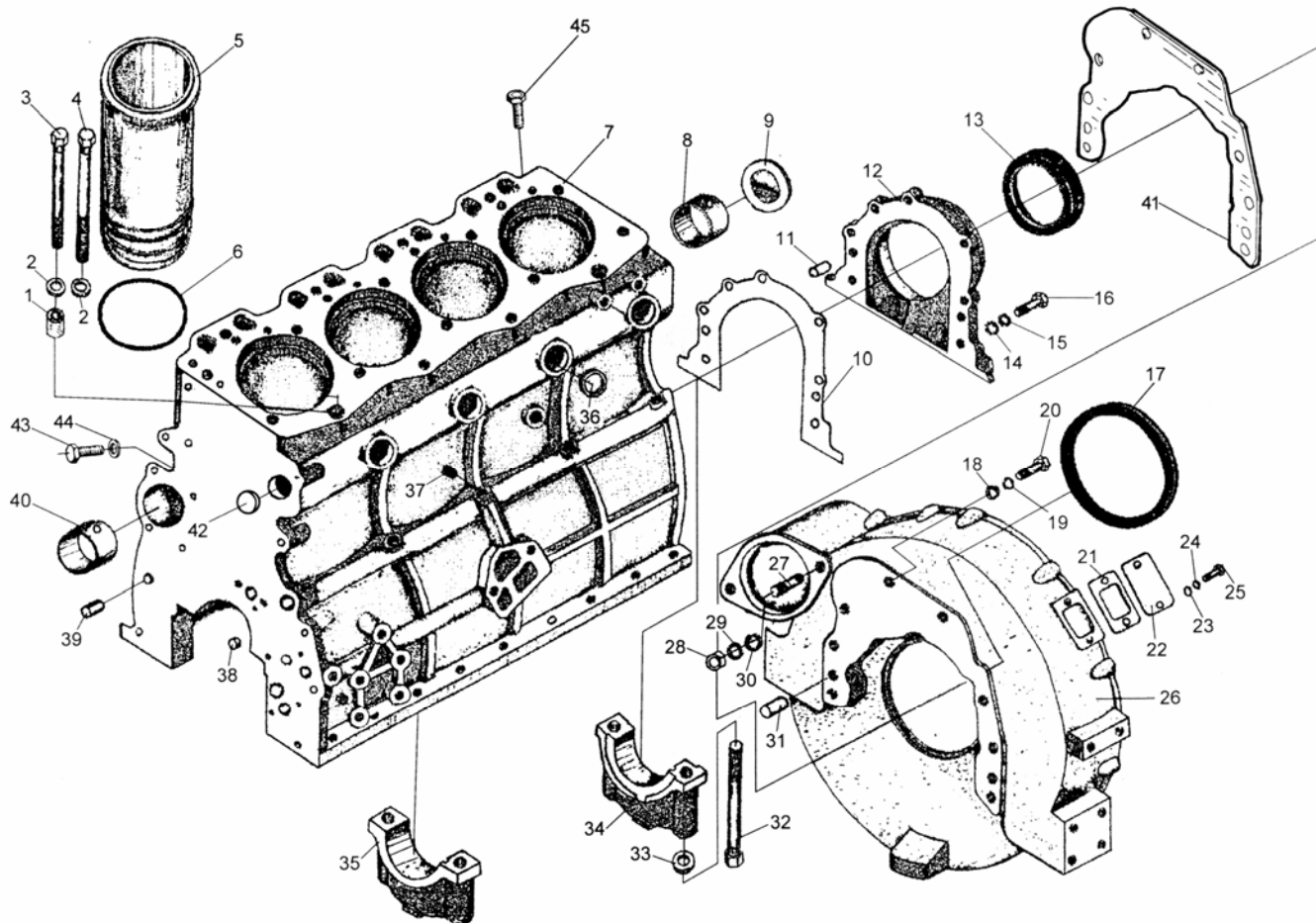
# ÍNDICE

|     |                                     |         |
|-----|-------------------------------------|---------|
| 1.  | Bloque de cilindros.....            | pág 5.  |
| 2.  | Sistema de distribución.....        | pág 9.  |
| 3.  | Tapa de cilindros.....              | pág 11. |
| 4.  | Pistón y Biela.....                 | pág 15. |
| 5.  | Cigüeñal - Volante.....             | pág 19. |
| 6.  | Árbol de levas.....                 | pág 22. |
| 7.  | Tren de válvulas.....               | pág 25. |
| 8.  | Tren de engranajes.....             | pág 29. |
| 9.  | Múltiple de admisión.....           | pág 32. |
| 10. | Carter de aceite.....               | pág 35. |
| 11. | Recolector de aceite.....           | pág 38. |
| 12. | Bomba de aceite.....                | pág 41. |
| 13. | Filtro bomba de aceite.....         | pág 44. |
| 14. | Respirador.....                     | pág 47. |
| 15. | Tubería de combustible.....         | pág 50. |
| 16. | Filtro de combustible.....          | pág 53. |
| 17. | Bomba inyección de combustible..... | pág 56. |
| 18. | Inyector de combustible.....        | pág 59. |
| 19. | Grifo de vaciado del agua.....      | pág 62. |

|     |                          |         |
|-----|--------------------------|---------|
| 20. | Termostato .....         | pág 65. |
| 21. | Bomba de agua .....      | pág 68. |
| 22. | Ventilador .....         | pág 71. |
| 23. | Alternador .....         | pág 15. |
| 24. | Motor de arranque .....  | pág 19. |
| 25. | Calentador de aire ..... | pág 22. |
| 26. | Medidores .....          | pág 25. |

# 1. Bloque de cilindros

1. Bloque de cilindros



1. Bloque de cilindros

| Item | Código           | Descripción                            | Cantidad |          |          |          |
|------|------------------|--|----------|----------|----------|----------|
|      |                  |  | 4DW91-63 | 4DW91A63 | 4DW81-46 | 4DW81-49 |
|      | 1002015-B01-0000 | Conjunto bloque de cilindro            |          |          | 1        | 1        |
|      | 1002015-B41-0000 | Conjunto bloque de cilindro            | 1        | 1        |          |          |
| 1    | 1002011-B01-9000 | Guía tapa de cilindro                  | 2        | 2        | 2        | 2        |
| 2    | 1003048-B01-0000 | Arandela                               | 18       | 18       | 18       | 18       |
| 3    | 1003047-B01-0000 | Tornillo                               | 4        | 4        | 4        | 4        |
| 4    | 1003046-B01-0000 | Camisa del cilindro                    | 14       | 14       | 14       | 14       |
| 5    | 1002016-B01-0000 | Camisa del cilindro                    |          |          | 4        | 4        |
|      | 1002016-B41-0000 | Camisa del cilindro                    | 4        | 4        |          |          |
| 6    | 1002017-B01-0000 | O´ring                                 |          |          | 8        | 8        |
|      | 1002017-B41-0000 | O´ring                                 | 8        | 8        |          |          |
| 7    | 1002014-B01-0000 | Bloque de cilindro                     |          |          | 1        | 1        |
|      | 1002014-B41-0000 | Bloque de cilindro                     | 1        | 1        |          |          |
| 8    | 1006024-B01-0000 | Casquillo delantero del arbol de levas | 1        | 1        | 1        | 1        |
| 9    | Q72155           | Tapa                                   | 1        | 1        | 1        | 1        |
| 10   | 1005068-B01-0000 | Junta                                  | 1        | 1        | 1        | 1        |
| 11   | Q5220816         | Perno                                  | 2        | 2        | 2        | 2        |
| 12   | 1005067-B01-0000 | Soporte trasero junta de aceite        | 1        | 1        | 1        | 1        |
| 13   | 1005060-B01-0000 | Junta de aceite                        | 1        | 1        | 1        | 1        |
| 14   | Q40108           | Arandela                               | 7        | 7        | 7        | 7        |

1. Bloque de cilindros

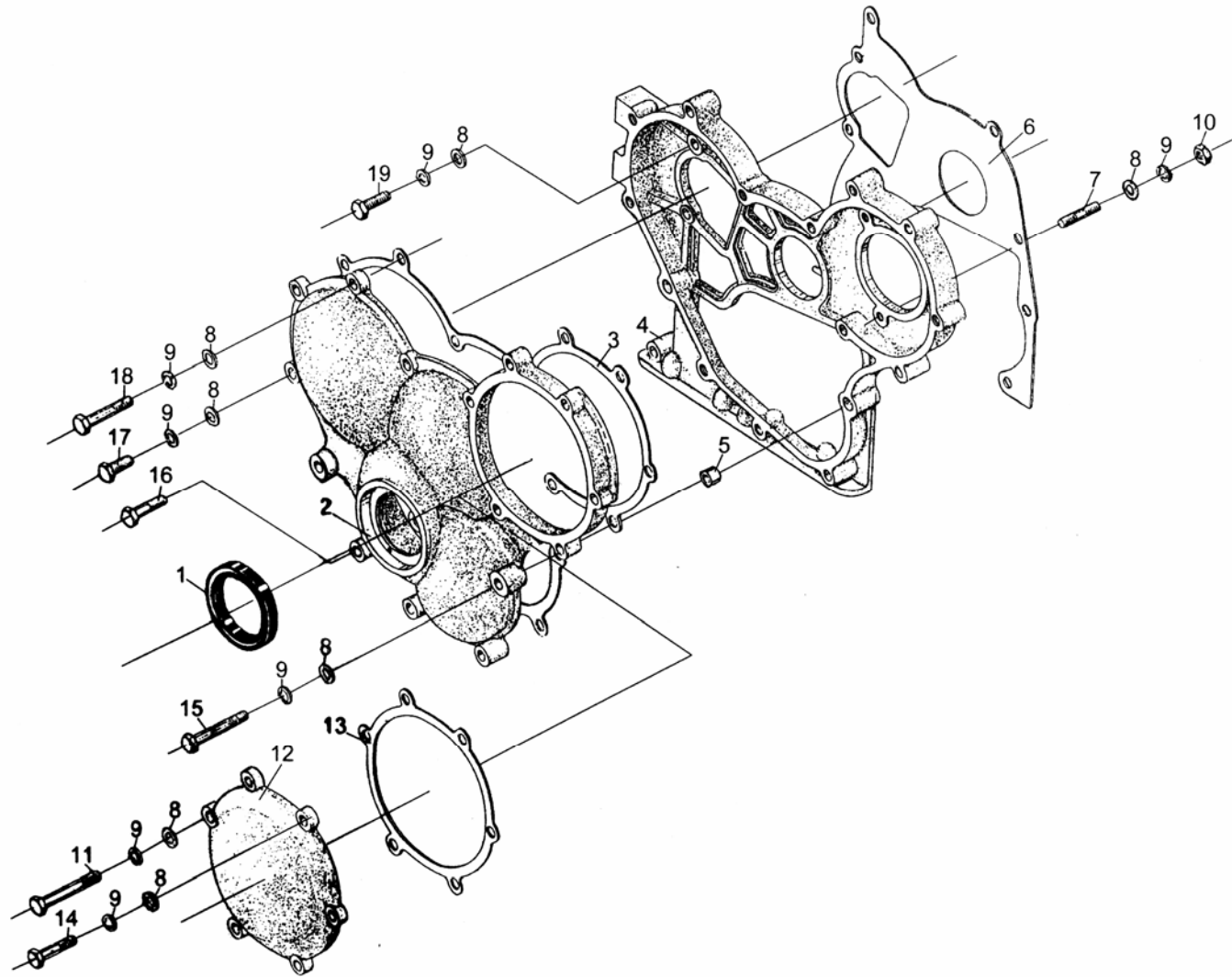
| Item | Código           | Descripción                       | Cantidad |          |          |          |
|------|------------------|-----------------------------------|----------|----------|----------|----------|
|      |                  |                                   | 4DW91-63 | 4DW91A63 | 4DW81-46 | 4DW81-49 |
| 15   | Q40408           | Arandela resorte                  | 7        | 7        | 7        | 7        |
| 16   | Q150B0825        | Tornillo hexagonal                | 7        | 7        | 7        | 7        |
| 17   | 1002068-B01-0000 | O´ring                            | 1        | 1        | 1        | 1        |
| 18   | Q40010           | Arandela                          | 8        | 8        | 8        | 8        |
| 19   | Q40410           | Arandela resorte                  | 8        | 8        | 8        | 8        |
| 20   | Q150B1030        | Tornillo hexagonal                | 8        | 8        | 8        | 8        |
| 21   | 1002063-B01-0000 | Junta del orificio de observación | 1        | 1        | 1        | 1        |
| 22   | 1002062-B01-0000 | Tapa del orificio de observación  | 1        | 1        | 1        | 1        |
| 23   | 1002234-B01-0000 | O´ring                            | 3        | 3        | 3        | 3        |
| 24   | Q40106           | Arandela                          | 2        | 2        | 2        | 2        |
| 25   | Q150B0612        | Tornillo hexagonal                | 2        | 2        | 2        | 2        |
| 26   | 1002061-B01-0000 | Carcasa del volante de inercia    | 1        | 1        | 1        | 1        |
| 27   | Q1201230         | Guía                              | 2        | 2        | 2        | 2        |
| 28   | Q340B12          | Tuerca hexagonal                  | 2        | 2        | 2        | 2        |
| 29   | Q40112           | Arandela                          | 2        | 2        | 2        | 2        |
| 30   | Q40312           | Arandela resorte                  | 2        | 2        | 2        | 2        |
| 31   | Q5221022         | Guía                              | 2        | 2        | 2        | 2        |
| 32   | 1005144-B01-0000 | Tornillo principal                | 10       | 10       | 10       | 10       |
| 33   | 1005146-B01-0000 | Arandela                          | 10       | 10       | 10       | 10       |

1. Bloque de cilindros

| Item | Código           | Descripción                 | Cantidad |          |          |          |
|------|------------------|-----------------------------|----------|----------|----------|----------|
|      |                  |                             | 4DW91-63 | 4DW91A63 | 4DW81-46 | 4DW81-49 |
| 34   | 1005143-B01-0000 | Bancada de cigüeñal         | 1        | 1        | 1        | 1        |
| 35   | 1005141-B01-0000 | Bancada de cigüeñal         | 4        | 4        | 4        | 4        |
| 36   | 1002231-B01-0000 | Tapón                       | 8        | 8        | 8        | 8        |
| 37   | 1002236-B01-0000 | Tapón                       | 4        | 4        | 4        | 4        |
| 38   | 1002232AB01-0000 | Tapón                       | 3        | 3        | 3        | 3        |
| 39   | 1002078-B01-0000 | Guía                        | 2        | 2        | 2        | 2        |
| 40   | 1006028-B01-0000 | Buje trasero arbol de levas | 1        | 1        | 1        | 1        |
|      | 1006025-B01-0000 | Buje medio arbol de levas   | 1        | 1        | 1        | 1        |
| 41   | 1002064-B01-0000 | Junta tapa de volante       | 1        | 1        | 1        | 1        |
| 42   | 1003093-B01-0000 | Tapón                       | 1        | 1        | 1        | 1        |
| 43   | Q617B10          | Tornillo                    | 1        | 1        | 1        | 1        |
| 44   | Q72310           | Arandela                    | 1        | 1        | 1        | 1        |
| 45   | Q61902           | Tornillo                    | 1        | 1        | 1        | 1        |



Sistema de distribución

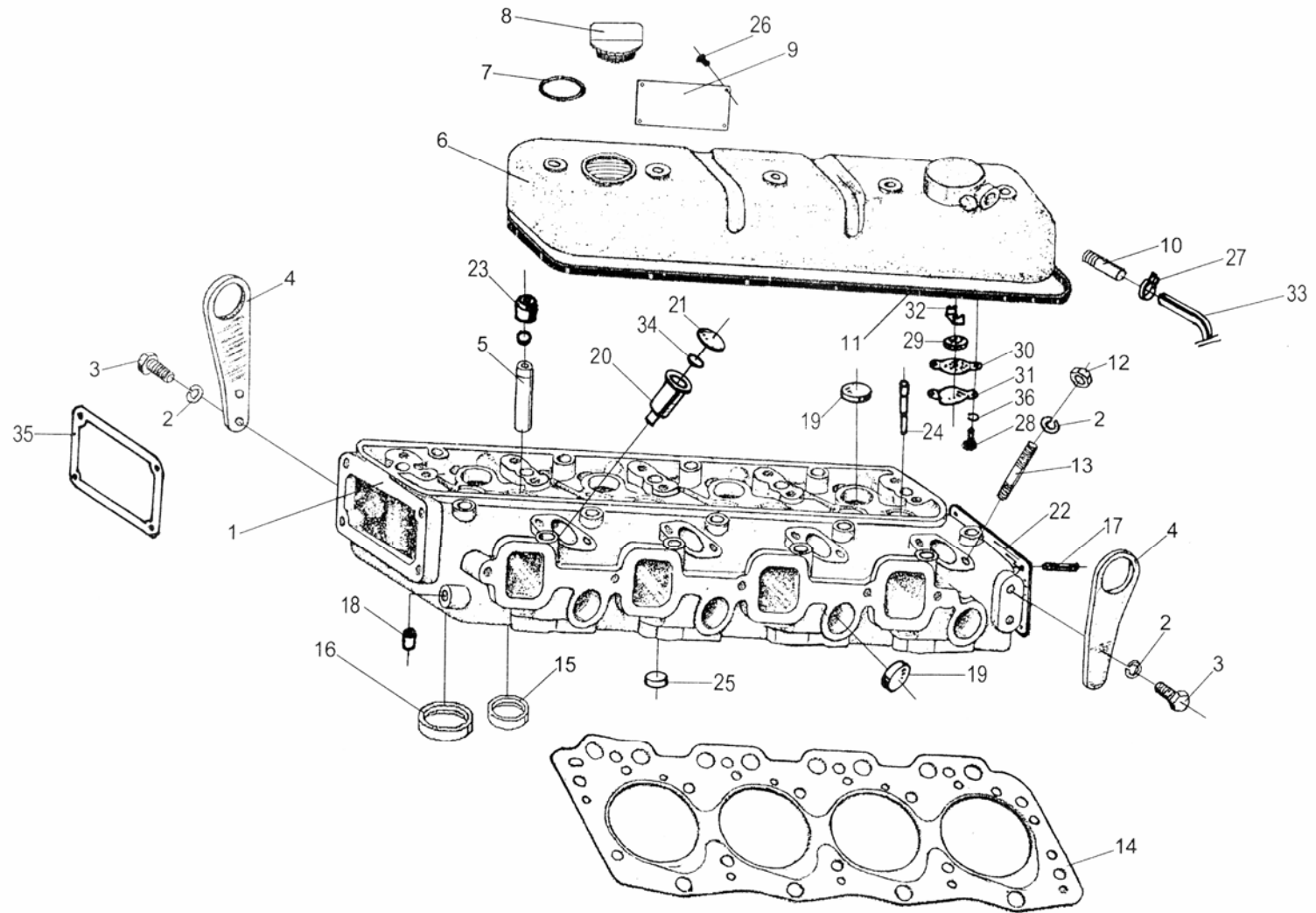


Sistema de distribución

| Item | Código           | Descripción              | Cantidad |          |          |          |
|------|------------------|--------------------------|----------|----------|----------|----------|
|      |                  |                          | 4DW91-63 | 4DW91A63 | 4DW81-46 | 4DW81-49 |
| 1    | 1005050-B01-0000 | Retén de aceite          | 2        | 2        | 2        | 2        |
| 2    | 1002073-B01-0000 | Carcasa de distribución  | 1        | 1        | 1        | 1        |
| 3    | 1002074-B01-0000 | Junta                    | 1        | 1        | 1        | 1        |
| 4    | 1002071-B01-0000 | Caja de engranajes       | 1        | 1        | 1        | 1        |
| 5    | 1002078-B01-0000 | Guía                     | 1        | 1        | 1        | 1        |
| 6    | 1002072-B01-0000 | Junta                    | 1        | 1        | 1        | 1        |
| 7    | Q1200840         | Esparrago doble rosca    | 3        | 3        | 3        | 3        |
| 8    | Q40008           | Arandela                 | 21       | 21       | 21       | 21       |
| 9    | Q40408           | Arandela resorte         | 21       | 21       | 21       | 21       |
| 10   | Q340B08          | Tuerca                   | 3        | 3        | 3        | 3        |
| 11   | Q150B0885        | Tuerca                   | 2        | 2        | 2        | 2        |
| 12   | 1002076-B01-0000 | Tapa frontal engr. bomba | 1        | 1        | 1        | 1        |
| 13   | 1002077-B01-0000 | Junta                    | 1        | 1        | 1        | 1        |
| 14   | Q150B0850        | Tornillo                 | 6        | 6        | 6        | 6        |
| 15   | Q150B0880        | Tornillo                 | 2        | 2        | 2        | 2        |
| 16   | Q150B0845        | Tornillo                 | 2        | 2        | 2        | 2        |
| 17   | Q150B0830        | Tornillo                 | 2        | 2        | 2        | 2        |
| 18   | Q150B0865        | Tornillo                 | 2        | 2        | 2        | 2        |
| 19   | Q150B0825        | Tornillo                 | 2        | 2        | 2        | 2        |
| 20   | 1002079-B01-0000 | Pointer                  | 1        | 1        | 1        | 1        |

## 2. Tapa de cilindros

## 2. Tapa de cilindros



2. Tapa de cilindros

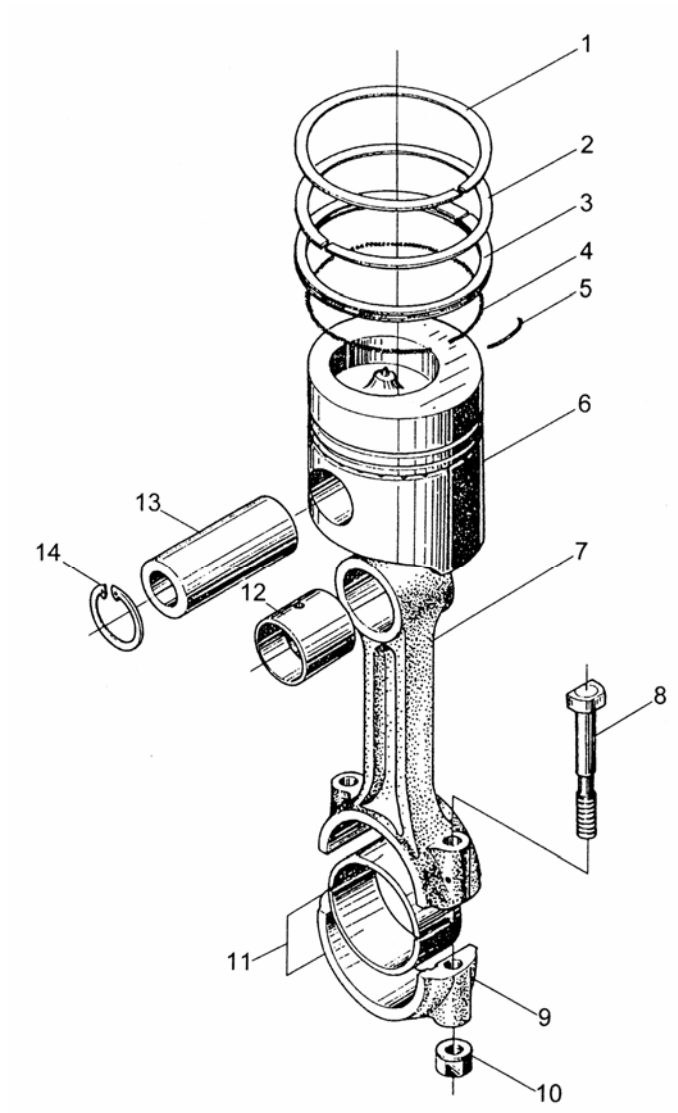
| Item | Código           | Descripción                         | Cantidad |          |          |          |
|------|------------------|-------------------------------------|----------|----------|----------|----------|
|      |                  |                                     | 4DW91-63 | 4DW91A63 | 4DW81-46 | 4DW81-49 |
| 1    | 1003011-B01-0000 | Tapa de cilindros                   | 1        | 1        | 1        | 1        |
|      | 1003010-B01-0000 | Conjunto tapa de cilindros          | 1        | 1        | 1        | 1        |
| 2    | Q40408F9         | Arandela resorte                    | 16       | 16       | 16       | 16       |
| 3    | Q150B0820        | Tornillo                            | 4        | 4        | 4        | 4        |
| 4    | 1003057-B01-0000 | Soporte de elevacion                | 2        | 2        | 2        | 2        |
| 5    | 1007032-B01-0000 | Guía de válvula                     | 8        | 8        | 8        | 8        |
| 6    | 1003031AB01-0000 | Cubierta tapa de cilindros          | 1        | 1        | 1        | 1        |
|      | 1003030-B01-0000 | Conjunto cubierta tapa de cilindros | 1        | 1        | 1        | 1        |
| 7    | GB 3452.1-92     | O-Ring 23.6x3.55                    | 1        | 1        | 1        | 1        |
| 8    | 1003033-B01-0000 | Tapa llenado de aceite              | 1        | 1        | 1        | 1        |
| 9    | 1003038-B01-0000 | Placa de identificación del motor   | 1        | 1        | 1        | 1        |
| 10   | 1003075-B01-0000 | Tubo de ventilación                 | 1        | 1        | 1        | 1        |
| 11   | 1003032-B01-0000 | Junta tapa valvulas                 | 1        | 1        | 1        | 1        |
| 12   | Q340B08          | Arandela                            | 12       | 12       | 12       | 12       |
| 13   | Q1200850         | Espar rago doble rosca              | 8        | 8        | 8        | 8        |
| 14   | 1003022-B01-0000 | Junta                               |          |          | 1        | 1        |
|      | 1003022-B41-0000 | Junta                               | 1        | 1        |          |          |
| 15   | 1007081-B01-0000 | Asiento de la válvula de escape     | 4        | 4        | 4        | 4        |
| 16   | 1007082-B01-0000 | Asiento de la válvula de admisión   | 4        | 4        | 4        | 4        |

2. Tapa de cilindro

| Item | Código           | Descripción           | Cantidad |          |          |          |
|------|------------------|-----------------------|----------|----------|----------|----------|
|      |                  |                       | 4DW91-63 | 4DW91A63 | 4DW81-46 | 4DW81-49 |
| 17   | GB898 GM8-M8x20  | Esparrago doble rosca | 4        | 4        | 4        | 4        |
| 18   | 1003306AA01-0000 | Tapón                 | 4        | 4        | 4        | 4        |
| 19   | 1003093-B01-0000 | Tapón                 | 8        | 8        | 8        | 8        |
| 20   | 1003056-B01-0000 | Buje de inyector      | 4        | 4        | 4        | 4        |
| 21   | 1003095-B01-0000 | Tapón                 | 4        | 4        | 4        | 4        |
| 22   | 1003098-B01-0000 | Junta termostato      | 1        | 1        | 1        | 1        |
| 23   | 1007035-B01-0000 | Retén                 | 8        | 8        | 8        | 8        |
| 24   | 1003096-B01-0000 | Acople                | 1        | 1        | 1        | 1        |
| 25   | 1003092-B01-0000 | Tapón                 | 3        | 3        | 3        | 3        |
| 26   | Q541026          | Remache               | 4        | 4        | 4        | 4        |
| 27   | Q676B25          | Brida                 | 1        | 1        | 1        | 1        |
| 28   | GB65-85          | Tornillo M6x12        | 2        | 2        | 2        | 2        |
| 29   | 1003074-B01-0000 | Filtro lana de acero  | 1        | 1        | 1        | 1        |
| 30   | 1003073-B01-0000 | Placa perforada       | 1        | 1        | 1        | 1        |
| 31   | 1003071-B01-0000 | Placa pre separador   | 1        | 1        | 1        | 1        |
| 32   | 1003072-B01-0000 | Estante deflector     | 1        | 1        | 1        | 1        |
| 33   | 3509011A001-0000 | Manguera de entrada   | 1        | 1        | 1        | 1        |
| 34   | GB3452. 1-92     | O-Ring 23.6x3.55      | 4        | 4        | 4        | 4        |
| 35   | 1306012-B01-0000 | Junta                 | 1        | 1        | 1        | 1        |
| 36   | Q40406F9         | Arandela resorte      | 2        | 2        | 2        | 2        |

### 3. Pistón y biela

3. Piston y biela





3. Pistón y biela

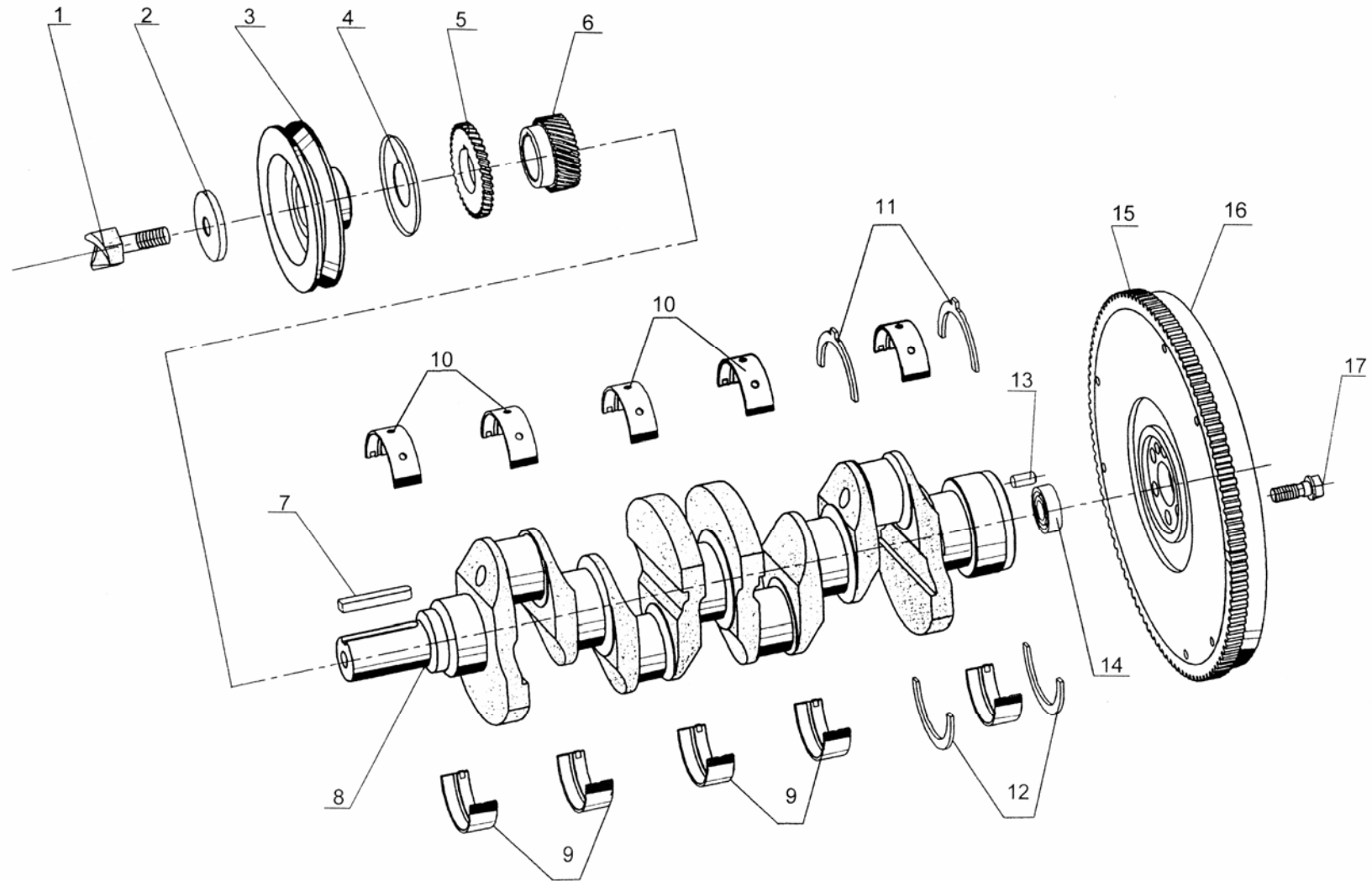
| Item | Código           | Descripción                  | Cantidad |          |          |          |
|------|------------------|------------------------------|----------|----------|----------|----------|
|      |                  |                              | 4DW91-63 | 4DW91A63 | 4DW81-46 | 4DW81-49 |
|      | 1004010-B01-0000 | Conjunto de biela            | 4        | 4        | 4        | 4        |
|      | 1004020-B01-0000 | Conjunto de anillo de aceite |          |          | 4        | 4        |
|      | 1004200-B41-0000 | Piezas del anillo de aceite  | 4        | 4        |          |          |
| 1    | 1004012-B01-0000 | 1er anillo de compresión     |          |          | 4        | 4        |
|      | 1004012-B41-0000 | 1er anillo de compresión     | 4        | 4        |          |          |
| 2    | 1004013-B01-0000 | 2do anillo de compresión     |          |          | 4        | 4        |
|      | 1004013-B41-0000 | 2do anillo de compresión     | 4        | 4        |          |          |
| 3    | 1004014-B01-0000 | Anillo de aceite             |          |          | 4        | 4        |
|      | 1004014-B41-0000 | Anillo de aceite             | 4        | 4        |          |          |
| 4    | 1004016-B01-0000 | Anillo resorte de aceite     |          |          | 4        | 4        |
|      | 1004016-B41-0000 | Anillo resorte de aceite     | 4        | 4        |          |          |
| 5    | 1004017-B01-0000 | Alambre de bloqueo           |          |          | 4        | 4        |
|      | 1004017-B01-0000 | Alambre de bloqueo           | 4        | 4        |          |          |
| 6    | 1004011-B01-0000 | Pistón                       |          |          | 4        |          |
|      | 1004011-B41-0000 | Pistón                       | 4        | 4        |          |          |
|      | 1004011-B71-0000 | Pistón                       |          |          |          | 4        |
| 7    | 1004021-B01-0000 | Biela                        | 4        | 4        | 4        | 4        |
| 8    | 1004023-B01-0000 | Tornillo de biela            | 8        | 8        | 8        | 8        |
| 9    | 1004022-B01-0000 | Biela tapa                   | 4        | 4        | 4        | 4        |

3. Pistón y biela

| Item | Código           | Descripción         | Cantidad |          |          |          |
|------|------------------|---------------------|----------|----------|----------|----------|
|      |                  |                     | 4DW91-63 | 4DW91A63 | 4DW81-46 | 4DW81-49 |
| 10   | 1004027—B01—0000 | Tuerca de biela     | 8        | 8        | 8        | 8        |
| 11   | 1004026—B01—0000 | Cojinete de biela   | 8        | 8        | 8        | 8        |
| 12   | 1004024—B01—0000 | Buje de biela       | 4        | 4        | 4        | 4        |
| 13   | 10)4018—B01—0000 | Perno de piston     | 4        | 4        | 4        | 4        |
| 14   | CB 893.1         | Seguro perno pistón | 8        | 8        | 8        | 8        |

## 4. Cigüeñal- volante

4. Cigüeñal - volante

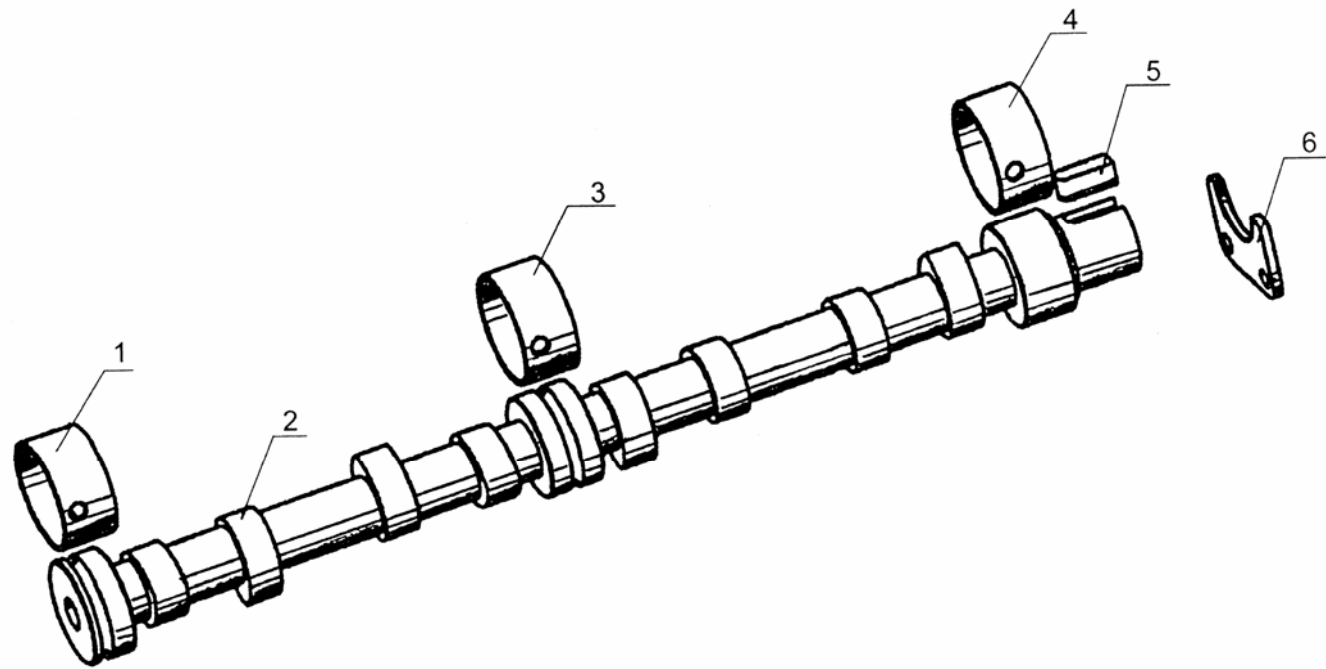


4. Cigüeñal - volante

| Item | Código           | Descripción                          | Cantidad |          |          |          |
|------|------------------|--------------------------------------|----------|----------|----------|----------|
|      |                  |                                      | 4DW91-63 | 4DW91A63 | 4DW81-46 | 4DW81-49 |
|      | 1005120-B01-0000 | Conjunto de engranaje                | 1        | 1        | 1        | 1        |
| 1    | 1005044-B01-0000 | Bulón sujeción de arranque           | 1        | 1        | 1        | 1        |
| 2    | 1005045-B01-0000 | Arandela bulón sujeción              | 1        | 1        | 1        | 1        |
| 3    | 1005046-B01-0000 | Polea de cigüeñal                    | 1        |          | 1        | 1        |
|      | 1005046-B45-0000 | Polea de cigüeñal                    |          | 1        |          |          |
| 4    | 1005036AB01-0000 | Plato de aceite delantero - cigüeñal | 1        | 1        | 1        | 1        |
| 5    | t005037-B01-0000 | Engranaje de cigüeñal                | 1        | 1        | 1        | 1        |
| 6    | 1005084-B01-0000 | Engranaje de distribución            | 1        | 1        | 1        | 1        |
| 7    | CB 1096          | Chaveta 10x63                        | 1        | 1        | 1        | 1        |
| 8    | 1005014-B0t-0000 | Cigüeñal                             |          |          | 1        |          |
|      | 1005014-B71-0000 | Cigüeñal                             | 1        | 1        |          | 1        |
| 9    | 1005172-B01-0000 | Cojinete de bancada inferior         | 5        | 5        | 5        | 5        |
| 10   | 100517i-B01-0000 | Cojinete de bancada superior         | 5        | 5        | 5        | 5        |
| 11   | 1005181-B01-0000 | Axiales superior                     | 2        | 2        | 2        | 2        |
| 12   | 1005182-B01-0000 | Axiales inferior                     | 2        | 2        | 2        | 2        |
| 13   | Q5221024         | Perno                                | 1        | 1        | 1        | 1        |
| 14   | GB 276-89 203    | Rodamiento                           | 1        | 1        | 1        | 1        |
| 15   | 1005122-B01-0000 | Corona de arranque                   | 1        | 1        | 1        | 1        |
| 16   | 1005121-B01-0000 | Volante                              | 1        | 1        | 1        | 1        |
| 17   | 1005123-B01-0000 | Bulón sujeción de volante            | 6        | 6        | 6        | 6        |

## 5. Árbol de levas

5. Árbol de levas



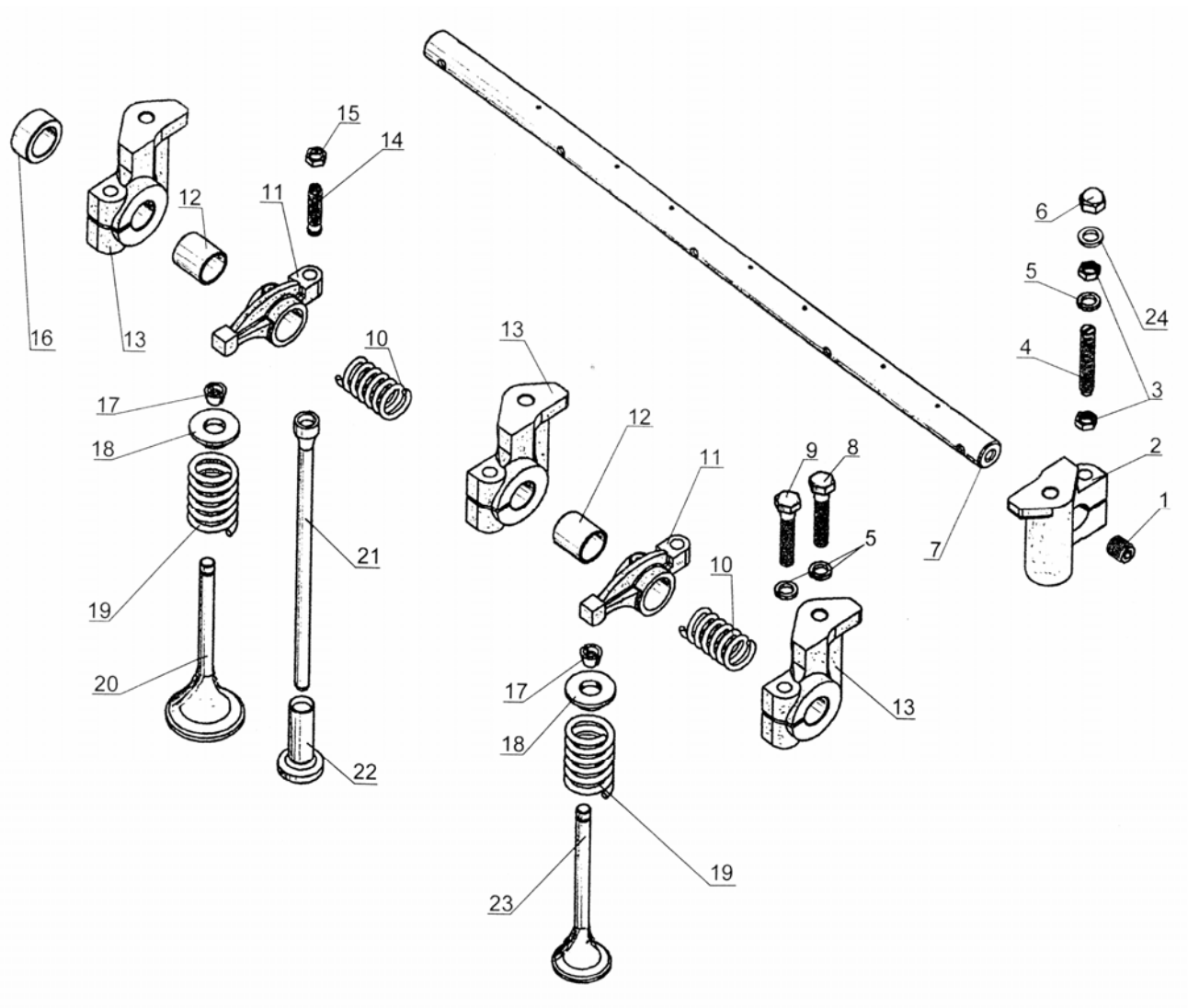
5.           Árbol de levas

| Item | Código           | Descripción                       | Cantidad |          |          |          |
|------|------------------|-----------------------------------|----------|----------|----------|----------|
|      |                  |                                   | 4DW91-63 | 4DW91A63 | 4DW81-46 | 4DW81-49 |
| 1    | 1006028-B01-0000 | Buje del árbol de levas (trasero) | 1        | 1        | 1        | 1        |
| 2    | 1006015-B01-0000 | Árbol de levas                    | 1        | 1        | 1        | 1        |
| 3    | 1006025-B01-0000 | Buje del árbol de levas (medio)   | 1        | 1        | 1        | 1        |
| 4    | 1006024-B01-0000 | Buje del árbol de levas (frontal) | 1        | 1        | 1        | 1        |
| 5    | GB 1096          | Chaveta 10x25                     | 1        | 1        | 1        | 1        |
| 6    | 1006018-B01-0000 | Placa de empuje                   | 1        | 1        | 1        | 1        |



## 6. Tren de válvulas

6. Tren de válvulas



6. Tren de válvulas

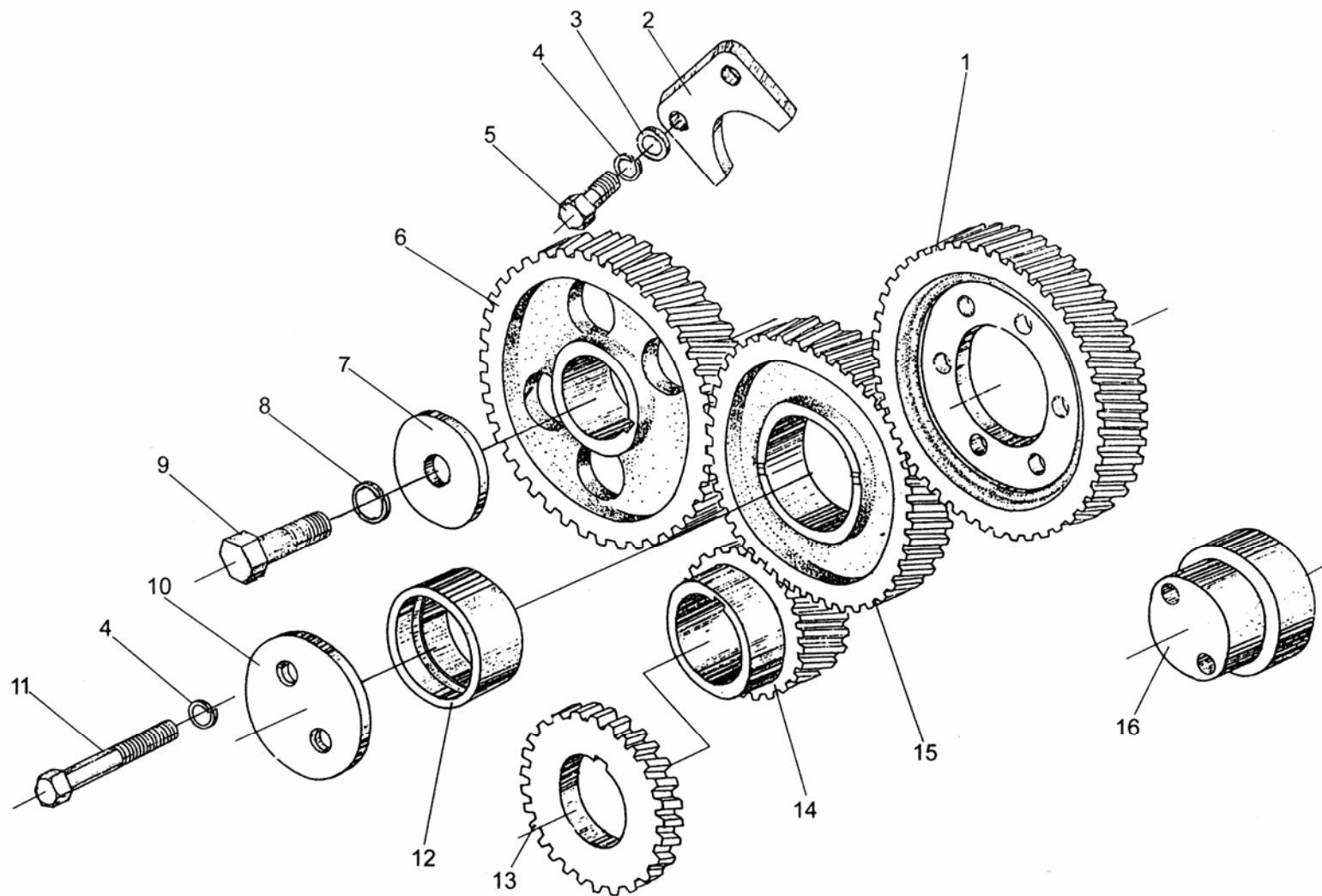
| Item | Código           | Descripción                            | Cantidad |          |          |          |
|------|------------------|--|----------|----------|----------|----------|
|      |                  |  | 4DW91-63 | 4DW91A63 | 4DW81-46 | 4DW81-49 |
| 1    | Q2821010         | Tuerca de bloqueo                      | 2        | 2        | 2        | 2        |
| 2    | 1007125-B01-0000 | Soporte del eje del balancín I         | 1        | 1        | 1        | 1        |
| 3    | Q340B08          | Tuerca hexagonal                       | 5        | 5        | 5        | 5        |
| 4    | 1007129-B01-0000 | Tornillo                               | 5        | 5        | 5        | 5        |
| 5    | Q40308           | Arandela resorte                       | 10       | 10       | 10       | 10       |
| 6    | GB 923-88        | Tuerca M8                              | 5        | 5        | 5        | 5        |
| 7    | 1007091-B01-0000 | Eje de balancín                        | 1        | 1        | 1        | 1        |
| 8    | Q150B0865        | Tornillo hexágono                      | 5        | 5        | 5        | 5        |
| 9    | Q150B0845        | Tornillo hexágono                      | 5        | 5        | 5        | 5        |
| 10   | 1007114-B01-0000 | Resorte del eje del balancín           | 4        | 4        | 4        | 4        |
| 11   | 1007096-B01-0000 | Balancín                               | 8        | 8        | 8        | 8        |
| 12   | 1007094-B01-0000 | Buje del balancín                      | 8        | 8        | 8        | 8        |
| 13   | 1007126-B01-0000 | Soporte del eje del balancín II        | 4        | 4        | 4        | 4        |
| ]4   | 1007097-B01-0000 | Tornillo de ajuste - Juego de válvulas | 8        | 8        | 8        | 8        |
| ]5   | 1007098-B01-0000 | Tuerca de ajuste - Juego de válvulas   | 8        | 8        | 8        | 8        |
| 16   | 1007093-B01-0000 | Buje del eje                           | 3        | 3        | 3        | 3        |
| 17   | 1007028-B01-0000 | Traba de válvula                       | 16       | 16       | 16       | 16       |
| 18   | 1007024-B01-0000 | Retén del resorte de la válvula        | 8        | 8        | 8        | 8        |
| 19   | 1007021-B01-0000 | Resorte de la válvula                  | 8        | 8        | 8        | 8        |

6. Tren de válvulas

| Item | Código           | Descripción         | Cantidad |          |          |          |
|------|------------------|---------------------|----------|----------|----------|----------|
|      |                  |                     | 4DW91-63 | 4DW91A63 | 4DW81-46 | 4DW81-49 |
| 20   | 1007011—B01—0000 | Válvula de admisión | 4        | 4        | 4        | 4        |
| 21   | 1007051—B01—0000 | Varilla de empuje   | 8        | 8        | 8        | 8        |
| 22   | 1007061—B01—0000 | Botador             | 8        | 8        | 8        | 8        |
| 23   | 1007016—B01—0000 | Válvula de escape   | 4        | 4        | 4        | 4        |
| 24   | Q40108           | Arandela plana      | 5        | 5        | 5        | 5        |

## 7. Tren de engranajes

7. Tren de engranajes



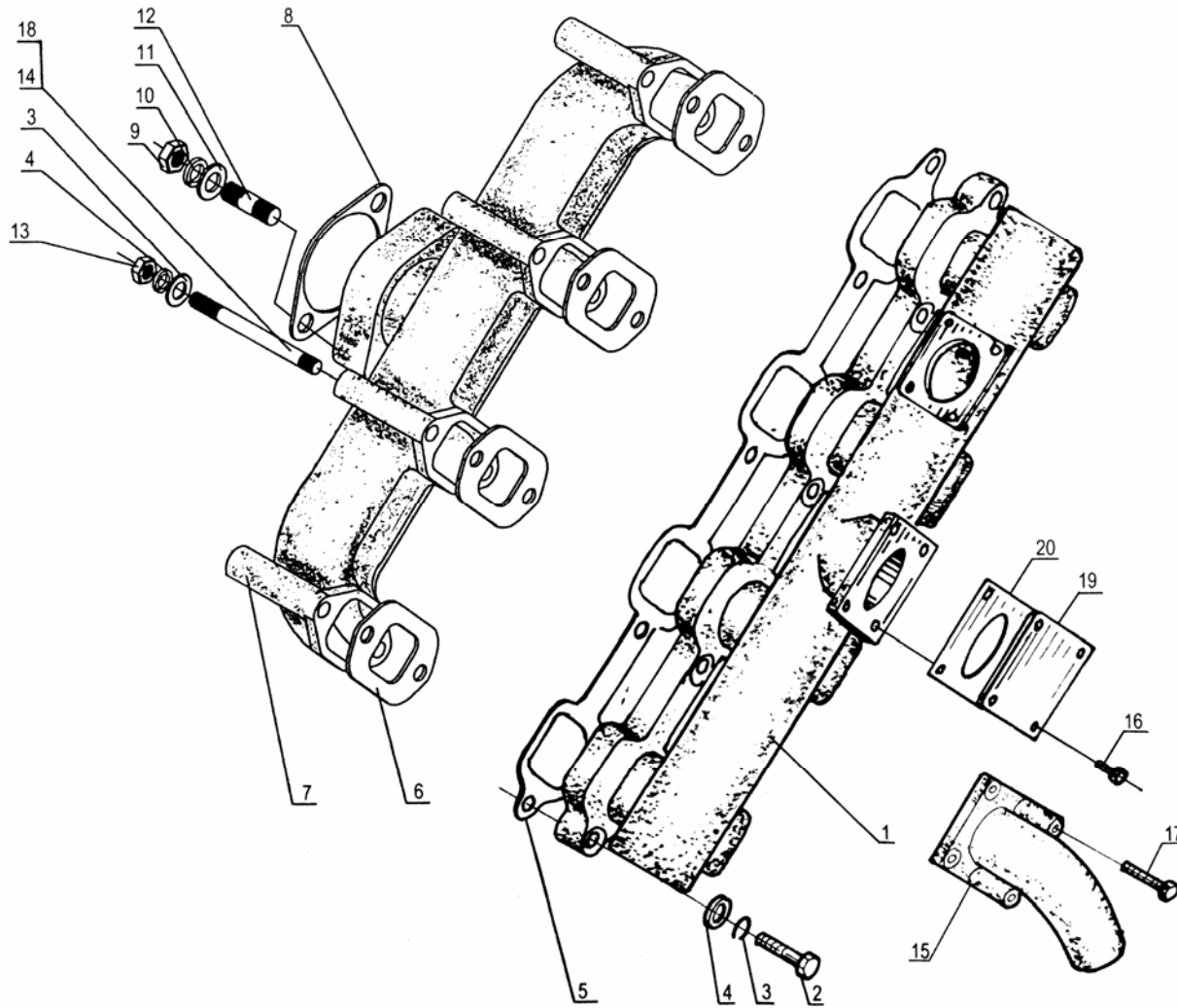
7. Engranaje

| Item | Código           | Descripción  | Cantidad |          |          |          |
|------|------------------|--|----------|----------|----------|----------|
|      |                  |  | 4DW91-63 | 4DW91A63 | 4DW81-46 | 4DW81-49 |
| 1    | 1111216-B01-0000 | Fuel injection pump drive gear                     | 1        | 1        | 1        | 1        |
| 2    | 1006018-B01-0000 | Placa - árbol de levas                             | 1        | 1        | 1        | 1        |
| 3    | Q40108           | Arandela   | 2        | 2        | 2        | 2        |
| 4    | Q40308           | Arandela resorte                                   | 4        | 4        | 4        | 4        |
| 5    | Q150B0816        | Tornillo   | 2        | 2        | 2        | 2        |
| 6    | 1006021-B0I-0000 | Engranaje de distribución - árbol de levas         | 1        | 1        | 1        | 1        |
| 7    | 1006022-B01-0000 | Placa - engranaje de distribución - árbol de levas | 1        | 1        | 1        | 1        |
| 8    | Q40312           | Arandela resorte                                   | 1        | 1        | 1        | 1        |
| 9    | Q150B1230        | Tornillo   | 1        | 1        | 1        | 1        |
| 10   | 1006049-B01-0000 | Placa - engranaje de sincronización (centro)       | 1        | 1        | 1        | 1        |
| 11   | Q150B0850        | Tornillo   | 2        | 2        | 2        | 2        |
| 12   | 1006046-B01-0000 | Buje - engranaje de sincronización (centro)        | 1        | 1        | 1        | 1        |
| 13   | 1005037-B01-0000 | Engranaje - bomba de aceite                        | 1        | 1        | 1        | 1        |
| 14   | 1005084-B01-0000 | Engranaje de distribución                          | 1        | 1        | 1        | 1        |
| 15   | 1006043-B01-0000 | Engranaje de distribución (medio)                  | 1        | 1        | 1        | 1        |
| 16   | 1006048-B01-0000 | Engranaje de distribución (medio) Eje              | 1        | 1        | 1        | 1        |

## 8. Múltiple de admisión



8. Múltiple admisión

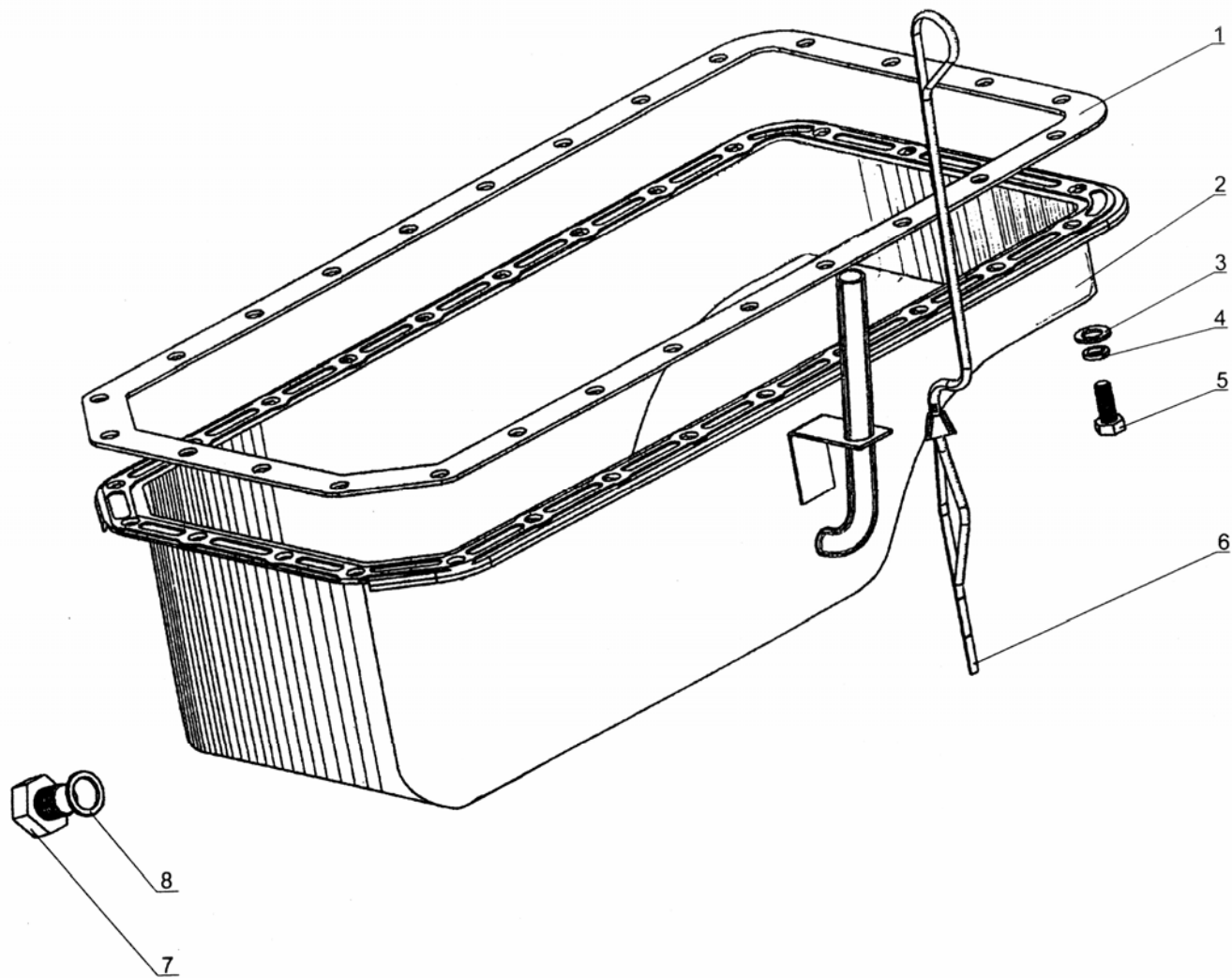


8. Múltiple de admisión

| Item | Código           | Descripción                        | Cantidad |          |          |          |
|------|------------------|------------------------------------|----------|----------|----------|----------|
|      |                  |                                    | 4DW91-63 | 4DW91A63 | 4DW81-46 | 4DW81-49 |
|      | 1008000-B01-0000 | Múltiple de admisión               | 1        | 1        | 1        | 1        |
| 1    | 1008016-B01-0000 | Múltiple de admisión               | 1        | 1        | 1        | 1        |
| 2    | Q150B0835        | Tornillo                           | 5        | 5        | 5        | 5        |
| 3    | Q40308           | Arandela resorte                   | 25       | 25       | 25       | 25       |
| 4    | Q40108           | Arandela                           | 17       | 17       | 17       | 17       |
| 5    | 1008017-B01-0000 | Junta - múltiple de admisión       | 1        | 1        | 1        | 1        |
| 6    | 1008045-B01-0000 | Junta - múltiple de escape         | 4        | 4        | 4        | 4        |
| 7    | 1008042-B01-0000 | Múltiple de escape                 | 1        | 1        | 1        | 1        |
| 8    | 1008046-B01-0000 | Junta - tubo de conexión de escape | 1        | 1        | 1        | 1        |
| 9    | Q340B10          | Tuerca                             | 2        | 2        | 2        | 2        |
| 10   | Q40310           | Arandela resorte                   | 2        | 2        | 2        | 2        |
| 11   | Q40110           | Arandela                           | 2        | 2        | 2        | 2        |
| 12   | Q1201020         | Esparrago doble rosca              | 2        | 2        | 2        | 2        |
| 13   | Q340B08          | Tuerca                             | 8        | 8        | 8        | 8        |
| 14   | Q1200880         | Esparrago doble rosca              | 4        | 4        | 4        | 4        |
| 15   | 1008018-B01-0000 | Conector, entrada                  | 1        | 1        | 1        | 1        |
| 16   | Q150B0825        | Tornillo                           | 10       | 10       | 10       | 10       |
| 17   | Q150B0890        | Tornillo                           | 2        | 2        | 2        | 2        |
| 18   | Q1200860         | Esparrago doble rosca              | 4        | 4        | 4        | 4        |
| 19   | 1008021          | Tapa                               | 2        | 2        | 2        | 2        |
| 20   | 1008019          | Junta                              | 4        | 4        | 4        | 4        |

## 9. Carter de aceite

9. Carter de aceite

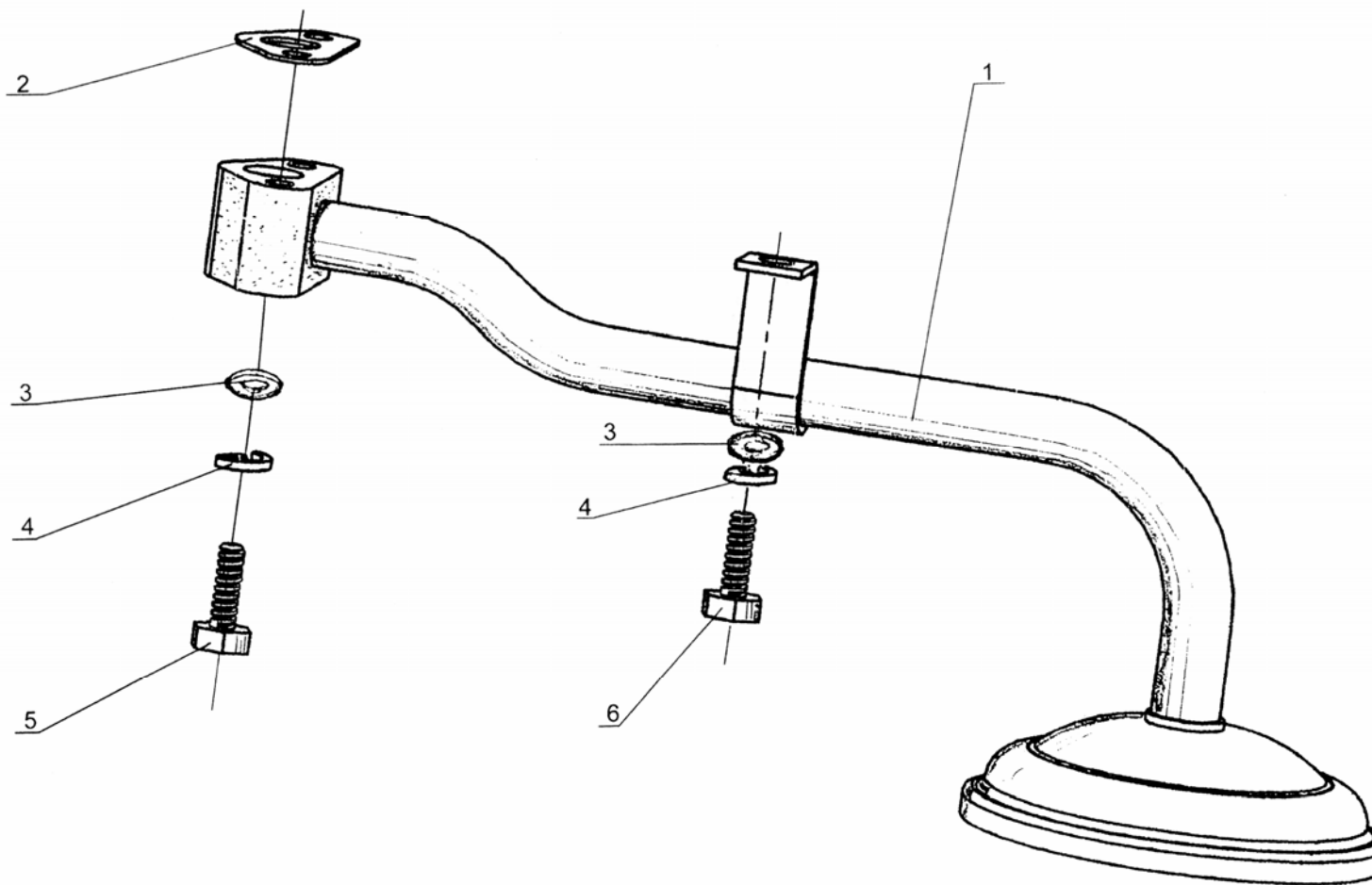


9. Carter de aceite

| Item | Código           | Descripción                | Cantidad |          |          |          |
|------|------------------|----------------------------|----------|----------|----------|----------|
|      |                  |                            | 4DW91-63 | 4DW91A63 | 4DW81-46 | 4DW81-49 |
|      | 1009000          | Carter de aceite           | 1        | 1        | 1        | 1        |
| 1    | 1009031          | Junta del carter de aceite | 1        | 1        | 1        | 1        |
| 2    | 1009010          | Carter de aceite           | 1        | 1        | 1        | 1        |
| 3    | Q40408           | Arandela resorte           | 26       | 26       | 26       | 26       |
| 4    | Q40108           | Arandela                   | 26       | 26       | 26       | 26       |
| 5    | Q150B0816        | Tornillo                   | 26       | 26       | 26       | 26       |
| 6    | 1009070-B01-0000 | Varilla nivel de aceite    | 1        | 1        | 1        | 1        |
| 7    | 1009022-B01-0000 | Tapón de drenaje de aceite | 1        | 1        | 1        | 1        |
| 8    | Q72320           | Arandela de sellado        | 1        | 1        | 1        | 1        |

## 10. Recolector de aceite

10. Recolector de aceite



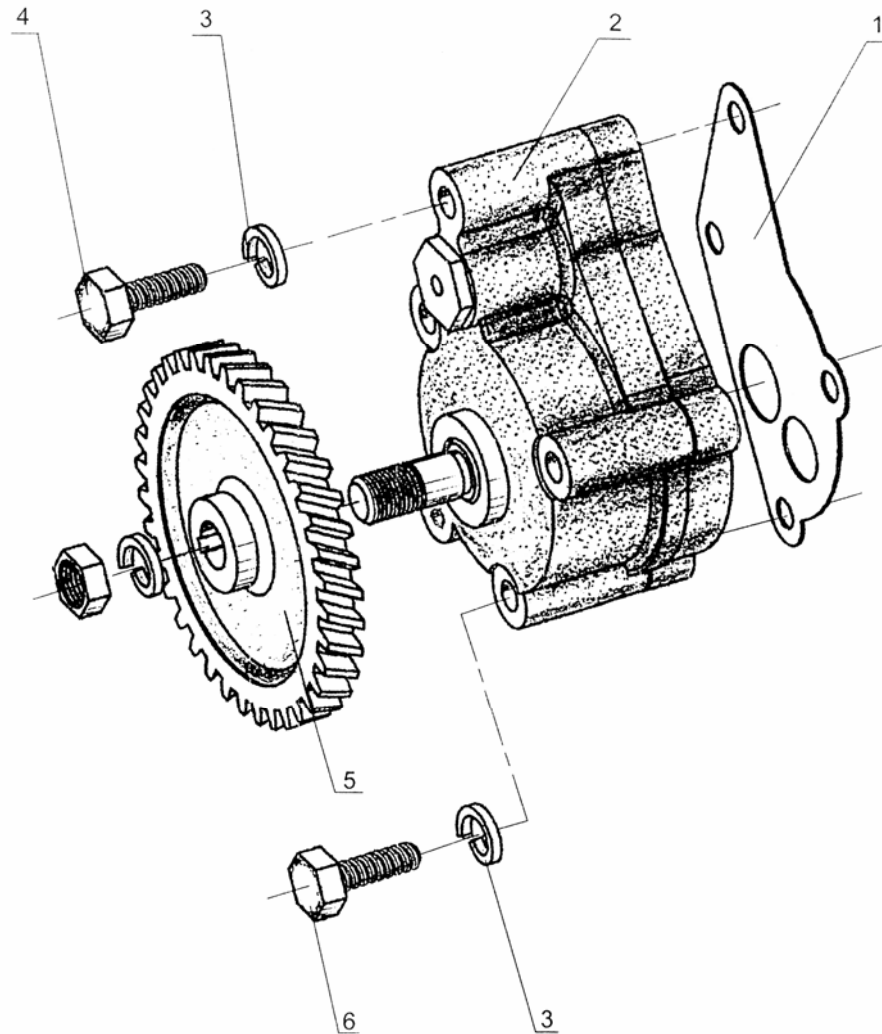
10. Recolector de aceite

| Item | Código           | Descripción          | Cantidad |          |          |          |
|------|------------------|----------------------|----------|----------|----------|----------|
|      |                  |                      | 4DW91-63 | 4DW91A63 | 4DW81-46 | 4DW81-49 |
| 1    | 1010010-B01-0000 | Recolector de aceite | 1        | 1        | 1        | 1        |
| 2    | 1010011-B01-0000 | Junta                | 1        | 1        | 1        | ]        |
| 3    | Q40108           | Junta                | 3        | 3        | 3        | 3        |
| 4    | Q40408           | Arandela resorte     | 3        | 3        | 3        | 3        |
| 5    | Q150B0840        | Tornillo             | 2        | 2        | 2        | 2        |
| 6    | Q150B0816        | Tornillo             | 1        | 1        | 1        | 1        |



## 11. Bomba de aceite

11. Bomba de aceite

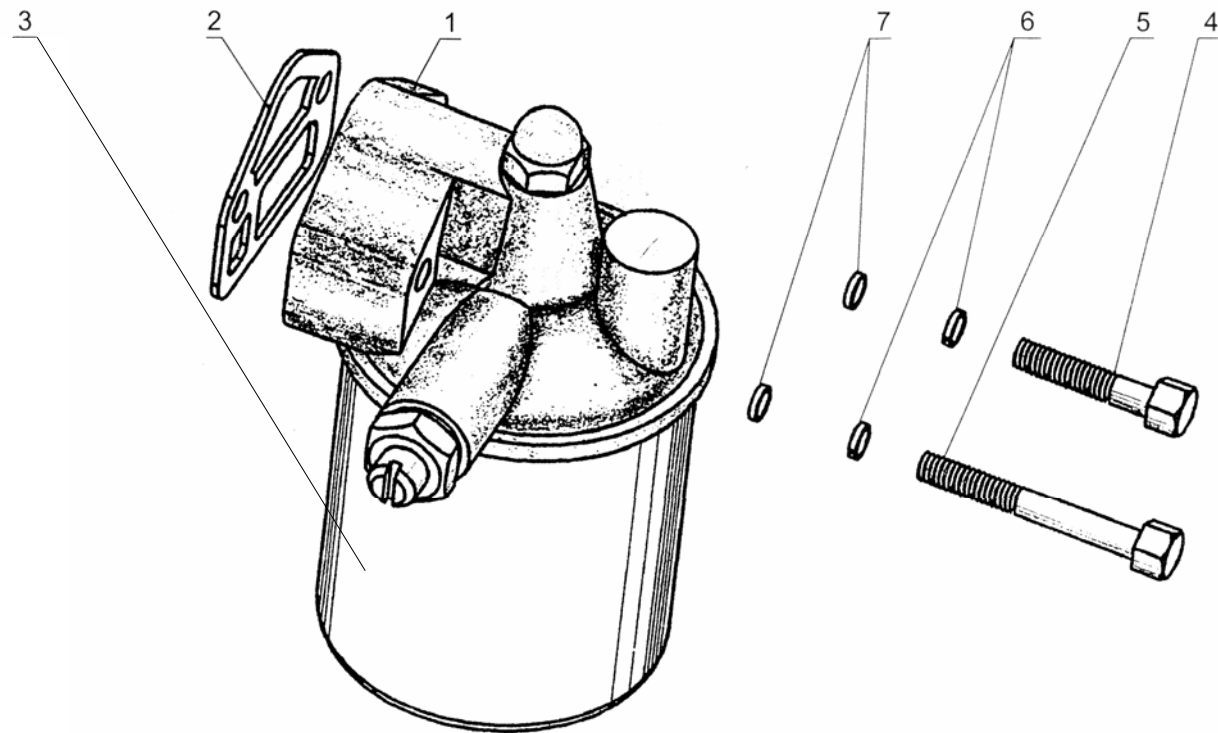


11. Bomba de aceite

| Item | Código           | Descripción               | Cantidad |          |          |          |
|------|------------------|---------------------------|----------|----------|----------|----------|
|      |                  |                           | 4DW91-63 | 4DW91A63 | 4DW81-46 | 4DW81-49 |
|      | 1011000-B01-0000 | Bomba de aceite           | 1        | 1        | 1        | 1        |
| 1    | 1011017-B01-0000 | Junta                     | 1        | 1        | 1        | 1        |
| 2    | 1011010-B01-0000 | Bomba de aceite           | 1        | 1        | 1        | 1        |
| 3    | Q40306           | Arandela resorte          | 4        | 4        | 4        | 4        |
| 4    | Q150B0655        | Tornillo                  | 1        | 1        | 1        | 1        |
| 5    | 1011014-B01-0000 | Engranaje bomba de aceite | 1        | 1        | 1        | 1        |
| 6    | Q150B0650        | Tornillo                  | 3        | 3        | 3        | 3        |

## 12. Filtro bomba de aceite

12. Filtro bomba de aceite

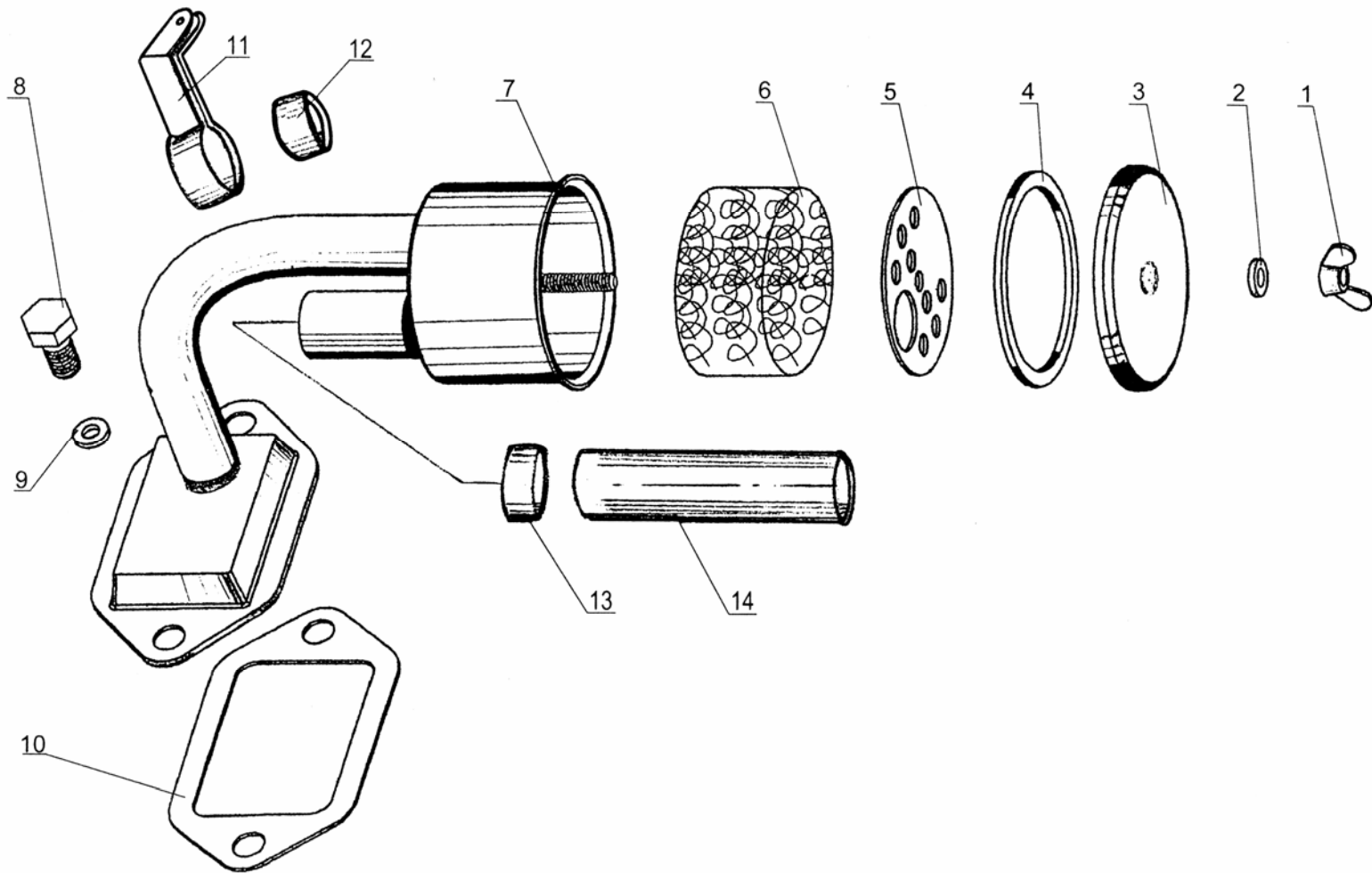


12. Filtro bomba de aceite

| Item | Código           | Descripción               | Cantidad |          |          |          |
|------|------------------|---------------------------|----------|----------|----------|----------|
|      |                  |                           | 4DW91-63 | 4DW91A63 | 4DW81-46 | 4DW81-49 |
|      | 1012000-B01-0000 | Base filtro de aceite     | 1        | 1        | 1        | 1        |
| 1    | 1012010-B01-0000 | Filtro bomba de aceite    | 1        | 1        | 1        | 1        |
| 2    | 1012027-B01-0000 | Junta - Filtro lubricante | 1        | 1        | 1        | 1        |
| 3    | MP45. 30. 001N   | Filtro de aceite roscado  | 1        | 1        | 1        | 1        |
| 4    | Q150B1025        | Tornillo                  | 1        | 1        | 1        | 1        |
| 5    | Q150B1050        | Tornillo                  | 1        | 1        | 1        | 1        |
| 6    | Q40410           | Arandela resorte          | 2        | 2        | 2        | 2        |
| 7    | Q40110           | Arandela                  | 2        | 2        | 2        | 2        |

## 13. Respirador

13. Respirador



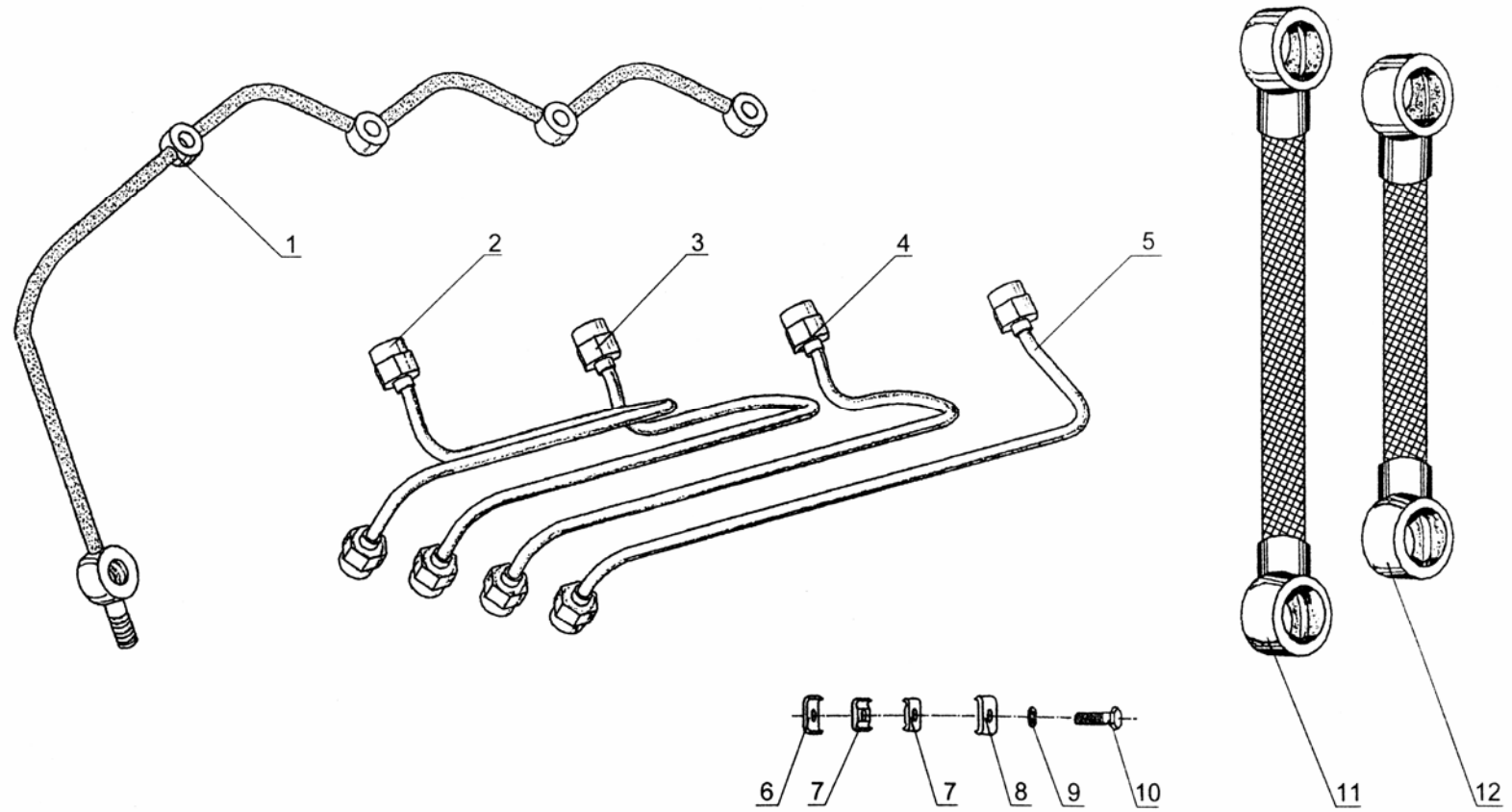


13. Respirador

| Item | Código           | Descripción         | Cantidad |          |          |          |
|------|------------------|---------------------|----------|----------|----------|----------|
|      |                  |                     | 4DW91-63 | 4DW91A63 | 4DW81-46 | 4DW81-49 |
|      | 1014000AB01-0000 | Respirador          | 1        | 1        | 1        | 1        |
| 1    | Q39005           | Tuerca mariposa     | 1        | 1        | 1        | 1        |
| 2    | Q40105           | Arandela            | 1        | 1        | 1        | 1        |
| 3    | 1014011-B01-0000 | Cobertura           | 1        | 1        | 1        | 1        |
| 4    | 1014012-B01-0000 | O-ring              | 1        | 1        | 1        | 1        |
| 5    | 1014014-B01-0000 | Placa de retención  | 1        | 1        | 1        | 1        |
| 6    | 1014013-B01-0000 | Filtro              | 1        | 1        | 1        | 1        |
| 7    | 1014020AB01-0000 | Base del respirador | 1        | 1        | 1        | 1        |
| 8    | Q150B0816        | Tornillo            | 2        | 2        | 2        | 2        |
| 9    | Q40408           | Arandela resorte    | 2        | 2        | 2        | 2        |
| 10   | 1014016-B01-0000 | Arandela            | 1        | 1        | 1        | 1        |
| 11   | 10141ii-B01-0000 | Placa intermedia    | 1        | 1        | 1        | 1        |
| 12   | 1014112-B01-0000 | Anillo              | 1        | 1        | 1        | 1        |
| 13   | Q676B25          | Anillo              | 1        | 1        | 1        | 1        |
| 14   | 3509011A001-0000 | Manguera (entrada)  | 1        | 1        | 1        | 1        |

## 14. Tubería de combustible

14. Tubería de combustible

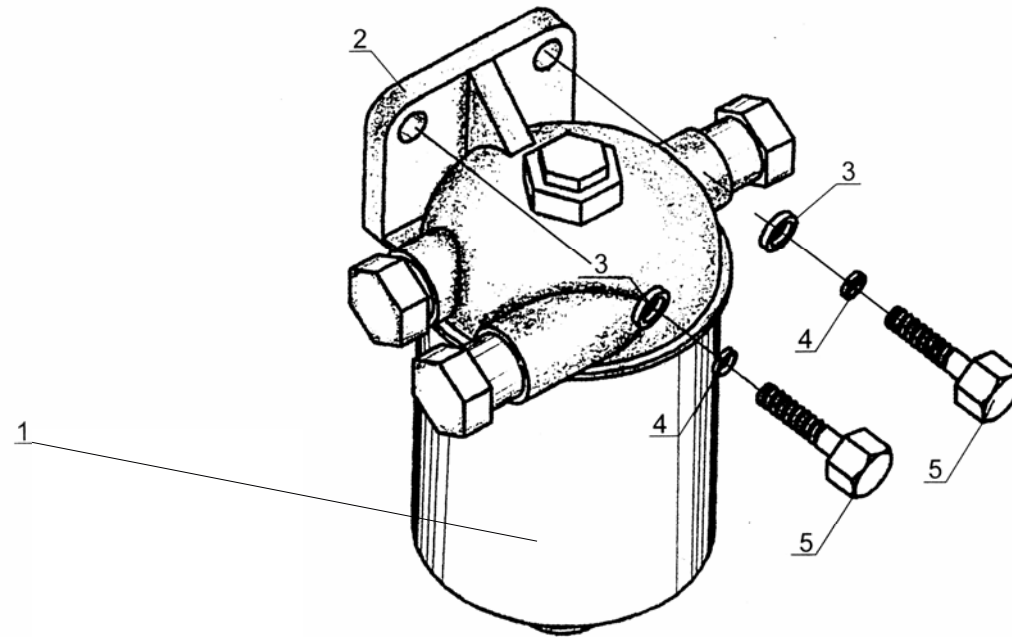


14. Tubería de combustible

| Item | Código           | Descripción                                | Cantidad |          |          |          |
|------|------------------|--|----------|----------|----------|----------|
|      |                  |  | 4DW91-63 | 4DW91A63 | 4DW81-46 | 4DW81-49 |
| 1    | 1104050-B01-0000 | Caño retorno combstible                    | ]        | 1        | 1        | ]        |
| 2    | 1129010-B01-0000 | 1er Caño de inyector                       | 1        | 1        | 1        | 1        |
| 3    | 1129015-B01-0000 | 2do Caño de inyector                       | 1        | 1        | 1        | 1        |
| 4    | 1129020-B01-0000 | 3er Caño de inyector                       | 1        | 1        | 1        | 1        |
| 5    | 1129025-B01-0000 | 4to Caño de inyector                       | 1        | 1        | 1        | 1        |
| 6    | 1129046-B01-0000 | Abrazadera                                 | 2        | 2        | 2        | 2        |
| 7    | 1129042-B01-0000 | Junta de goma                              | 4        | 4        | 4        | 4        |
| 8    | 1129041-B01-0000 | Abrazadera                                 | 2        | 2        | 9        | 2        |
| 9    | Q40305           | Arandela                                   | 2        | 2        | 2        | 2        |
| 10   | Q150B0525        | Tornillo                                   | 2        | 2        | 2        | 2        |
| 11   | 1104030-B01-0000 | Tubo flexible de suministro de combustible | 1        | 1        | 1        | 1        |
| 12   | 1104040-B01-0000 | Tubo flexible de suministro de combustible | 1        | 1        | 1        | 1        |

## 15. Filtro de combustible

15. Filtro de combustible



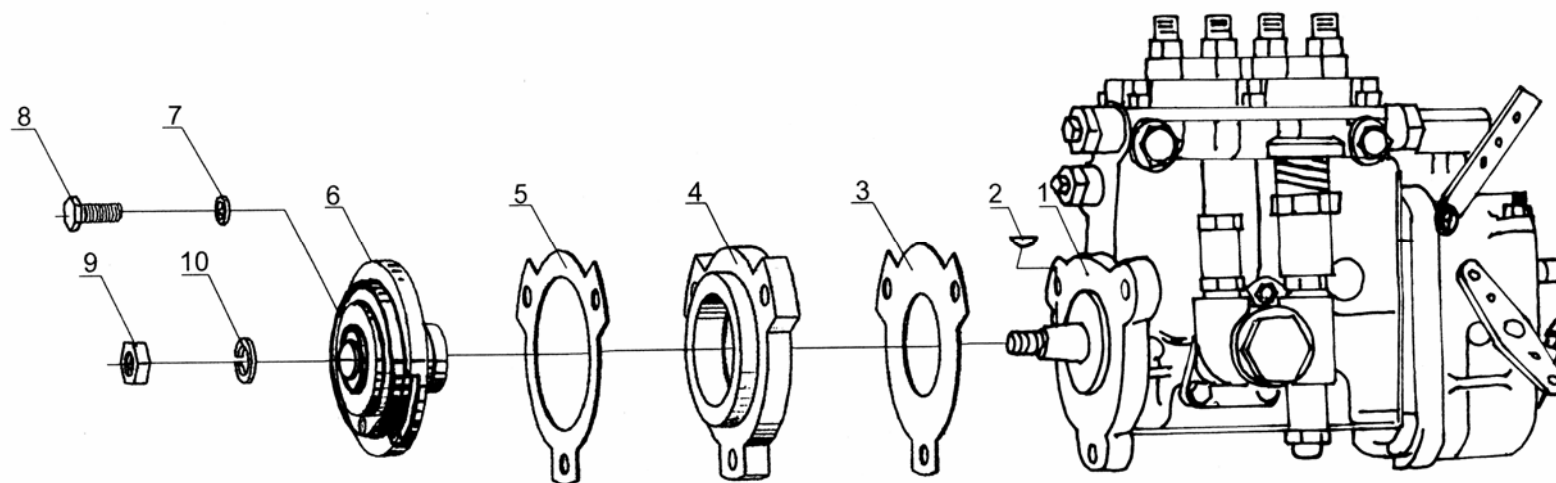
15. Filtro de combustible

| Item | Código           | Descripción                | Cantidad |          |          |          |
|------|------------------|----------------------------|----------|----------|----------|----------|
|      |                  |                            | 4DW91-63 | 4DW91A63 | 4DW81-46 | 4DW81-49 |
| 1    | MI4-2400N        | Filtro de combustible 4108 | 1        | 1        | 1        | 1        |
| 2    | 1117000-B01-0000 | Elemento del filtro        | 1        | 1        | 1        | 1        |
| 3    | Q40L08           | Arandela                   | 2        | 2        | 2        | 2        |
| 4    | Q40308           | Arandela resoste           | 2        | 2        | 2        | 2        |
| 5    | Q150B0820        | Tornillo                   | 2        | 2        | 2        | 2        |

## 16. Bomba inyección de combustible



16. Bomba inyección de combustible

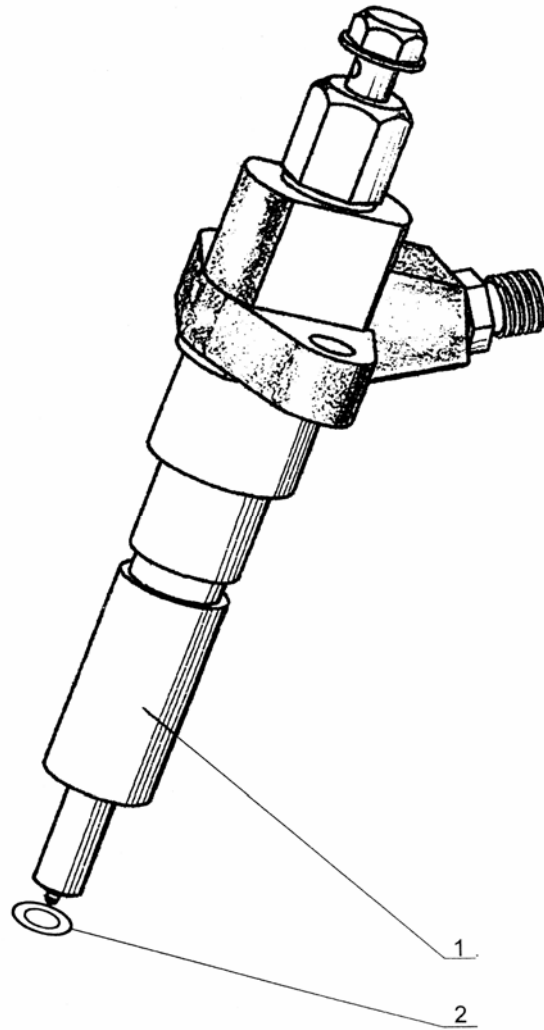


16. Bomba inyección de combustible

| Item | Código           | Descripción                       | Cantidad |          |          |          |
|------|------------------|-----------------------------------|----------|----------|----------|----------|
|      |                  |                                   | 4DW91—63 | 4DW91A63 | 4DW81—46 | 4DW81—49 |
| 1    | 1111000-B45-HG10 | Bomba de inyección de combustible | 1        | 1        |          |          |
|      | 1111000-B01-0000 | Bomba de inyección de combustible |          |          | 1        | 1        |
| 2    | Gb1099-79        | 4x6.5x16 Chaveta                  | 1        | 1        | 1        | 1        |
| 3    | 1111014-B0t-0000 | Junta                             | 1        | 1        | 1        | 1        |
| 4    | 1111011-B01-0000 | Espaciador                        | 1        | 1        | 1        | 1        |
| 5    | 1111012-B01-0000 | Junta                             | 1        | 1        | 1        | 1        |
| 6    | 1111013-B01-0000 | Inyección - dispositivo de avance | 1        | 1        | 1        | 1        |
| 7    | Q150B0616        | Tornillo                          | 6        | 6        | 6        | 6        |
| 8    | Q40306           | Arandela resorte                  | 6        | 6        | 6        | 6        |
| 9    | GB6170-86        | M12 Tuerca                        | 1        | 1        | 1        | 1        |
| 10   | GB859-87         | Arandela resorte                  | 1        | 1        | 1        | 1        |

## 17. Inyector de combustible

17. Inyector de combustible

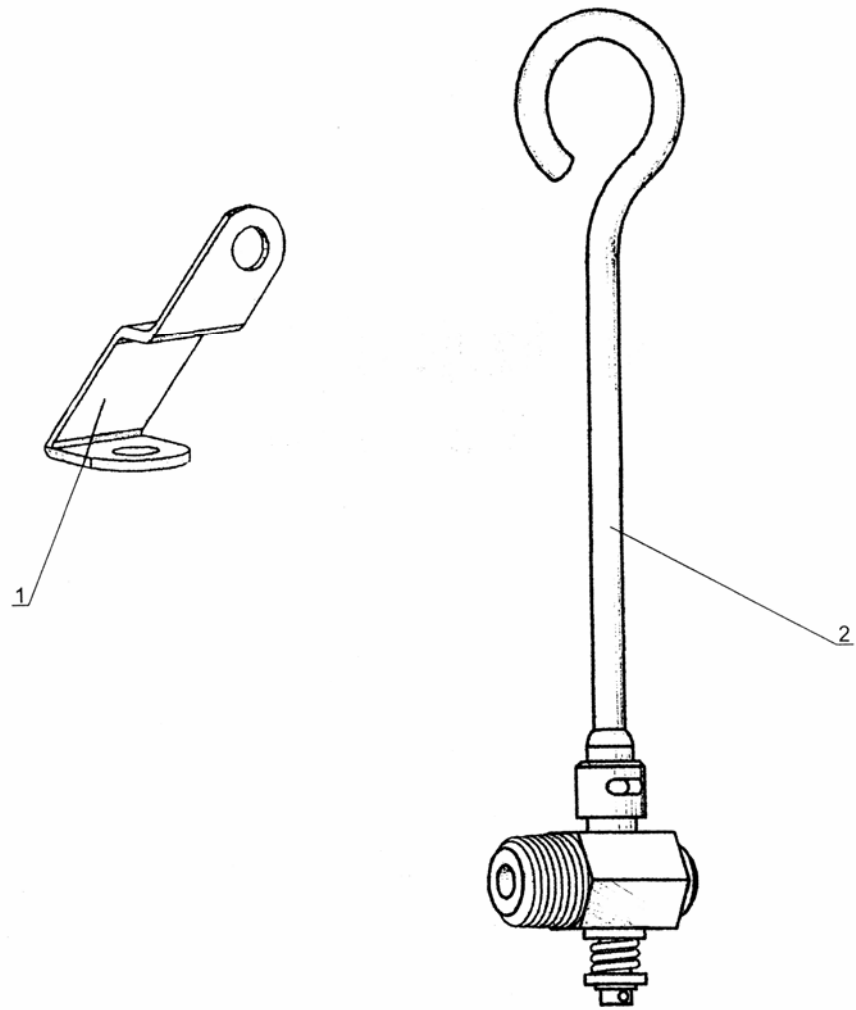


17. Inyector de combustible

| Item | Código           | Descripción             | Cantidad |          |         |         |
|------|------------------|-------------------------|----------|----------|---------|---------|
|      |                  |                         | 4DW91-3  | 4DW91A63 | 4DW81-6 | 4DW81-9 |
| 1    | 1112000—B01—0000 | Inyector de combustible | 4        | 4        | 4       | 4       |
| 2    | 1112308—001—0000 | Arandela                | 4        | 4        | 4       | 4       |
|      | 1112307—001—m)00 | Arandela                | 8        | 8        | 8       | 8       |

## 18. Grifo de vaciado del agua

18. Grifo de vaciado del agua



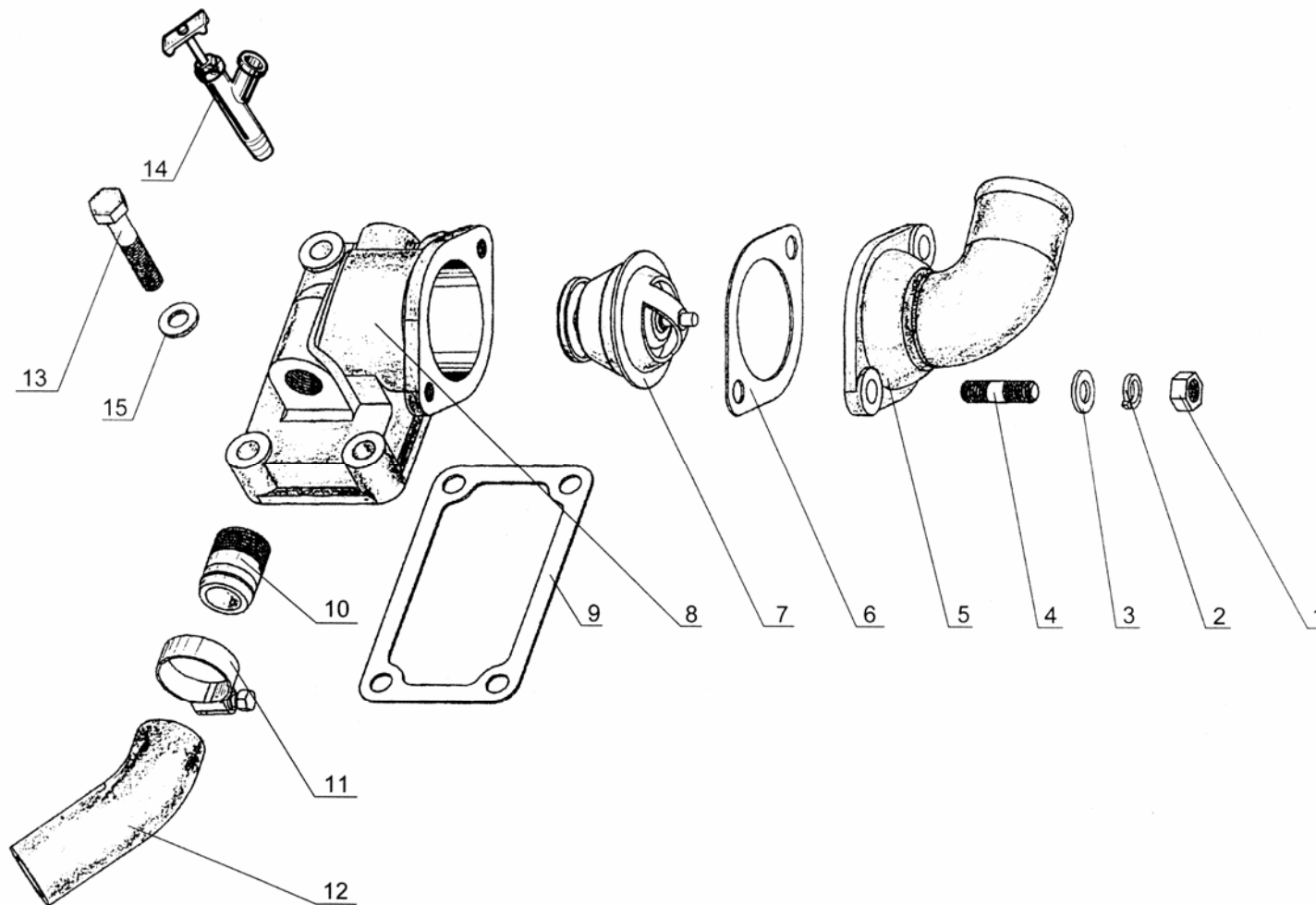
18. Grifo de vaciado del agua

| hem | Código           | Descripción               | Cantidad |          |         |         |
|-----|------------------|---------------------------|----------|----------|---------|---------|
|     |                  |                           | 4DW91-3  | 4DW91A63 | 4DW81-6 | 4DW81-9 |
| 1   | 1305010—B01—0000 | Grifo de vaciado del agua | 1        | 1        | 1       | 1       |
| 2   | 1305012—B01—0000 | Soporte                   | 1        | 1        | 1       | 1       |



## 19. Termostato

19. Termostato

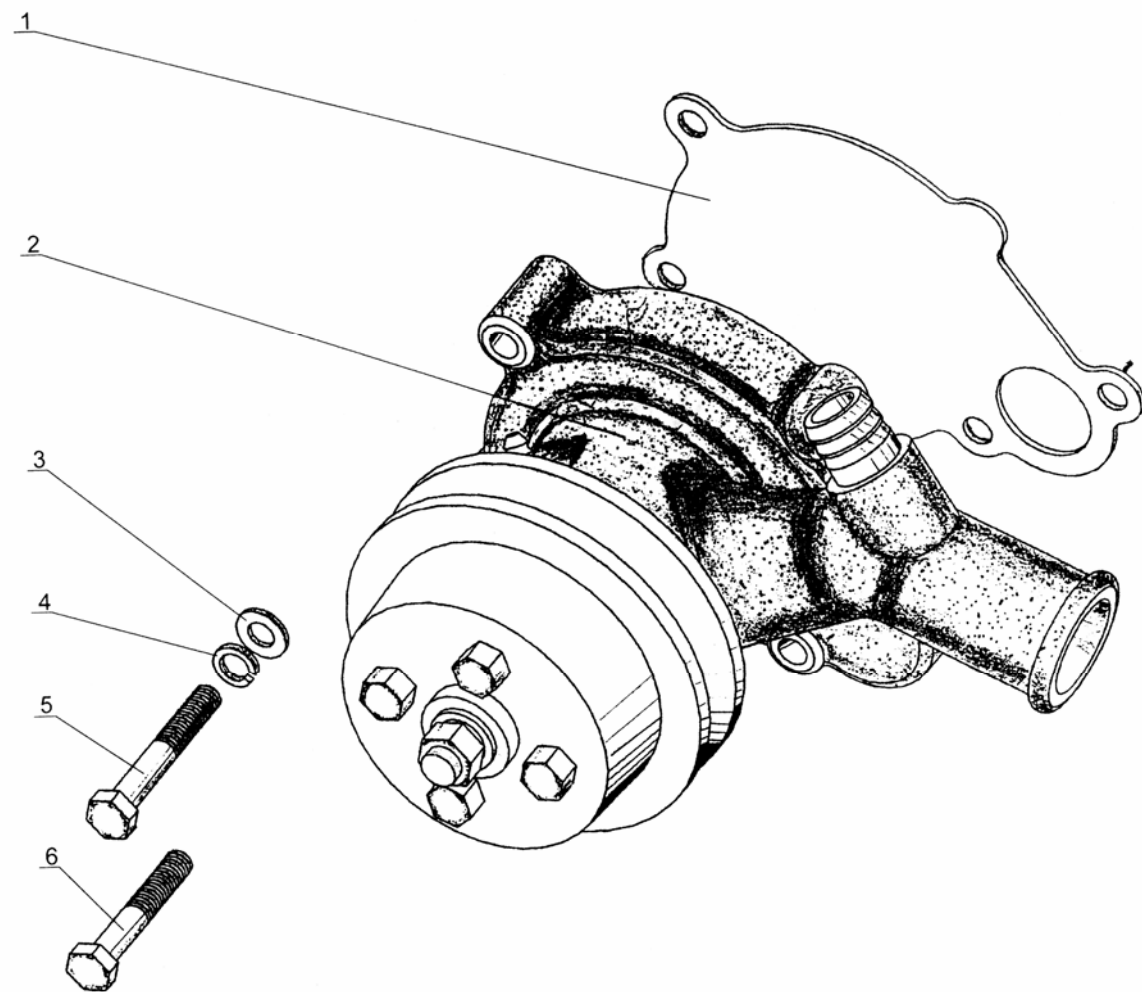


19. Termostato

| Item | Código           | Descripción                             | Cantidad |          |          |          |
|------|------------------|---|----------|----------|----------|----------|
|      |                  |   | 4DW91-63 | 4DW91A63 | 4DW81-46 | 4DW81-49 |
|      | 1306000-B01-0000 | Termostato                              | 1        | 1        | 1        | 1        |
| 1    | Q340B08          | Tuerca                                  | 2        | 2        | 2        | 2        |
| 2    | Q40308           | Arandela resorte                        | 6        | 6        | 6        | 6        |
| 3    | Q40108           | Arandela                                | 6        | 6        | 6        | 6        |
| 4    | Q1200820         | Esparrago doble rosca                   | 2        | 2        | 2        | 2        |
| 5    | 1306013-B01-0000 | Tapa del termostato                     | 1        | 1        | 1        | 1        |
| 6    | 1303014-B01-0000 | Junta termostato                        | 1        | 1        | 1        | 1        |
| 7    | 1306010-B01-0000 | Termostato estilo 1052A                 | 1        | 1        | 1        | 1        |
| 8    | 1306011AB01-0000 | Alojamiento del termostato              | 1        | 1        | 1        | 1        |
| 9    | 1306012-B01-0000 | Junta                                   | 1        | 1        | 1        | 1        |
| 10   | 1306033-B01-0000 | Empalme de derivación - tubería de agua | 1        | 1        | 1        | 1        |
| 11   | Q67228           | Brida                                   | 2        | 2        | 2        | 2        |
| 12   | 1306019-B01-0000 | Tubo de agua del termostato             | 1        | 1        | 1        | 1        |
| 13   | Q150B0835        | Tornillo                                | 4        | 4        | 4        | 4        |
| 14   | 1306020-B01-0000 | Válvula de agua caliente                | 1        | 1        | 1        | 1        |
| 15   | Q40108 四         | Arandela                                | 4        | 4        | 4        | 4        |

## 20. Bomba de agua

20. Bomba de agua

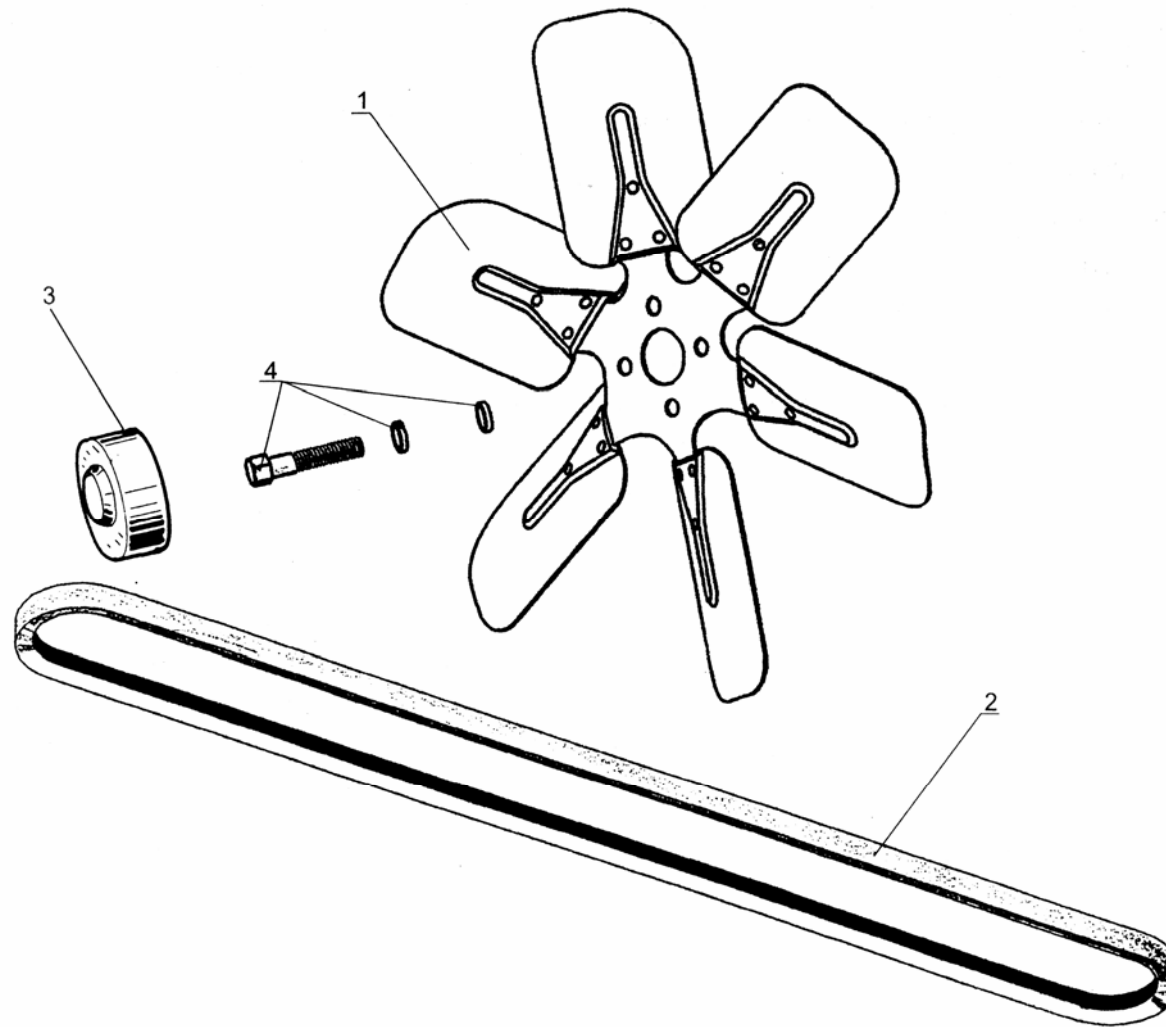


20. Bomba de agua

| Item | Código           | Descripción      | Cantidad |          |          |          |
|------|------------------|------------------|----------|----------|----------|----------|
|      |                  |                  | 4DW91-63 | 4DW91A63 | 4DW81-46 | 4DW81-49 |
|      | 1307000-B01-0000 | Bomba de agua    | 1        | 1        | 1        | 1        |
| 1    | 1307012-B01-0000 | Junta            | 1        | 1        | 1        | 1        |
| 2    | 1307010BB01—m)00 | Bomba de agua    | 1        | 1        | 1        | 1        |
| 3    | Q40108           | Arandela         | 4        | 4        | 4        | 4        |
| 4    | Q40308           | Arandela resorte | 4        | 4        | 4        | 4        |
| 5    | Q150B0855        | Tornillo         | 1        | 1        | 1        | 1        |
| 6    | Q150B0850        | Tornillo         | 3        | 3        | 3        | 3        |

## 21. Ventilador

21. Ventilador



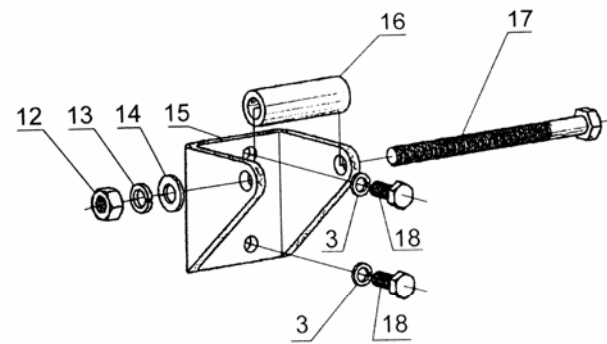
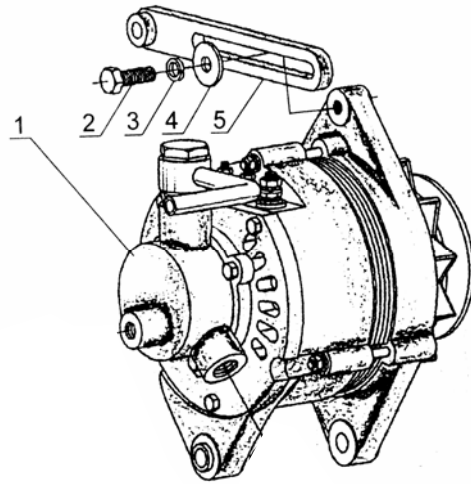


21. Ventilador

| Item | Código            | Descripción           | Cantidad |          |          |          |
|------|-------------------|-----------------------|----------|----------|----------|----------|
|      |                   |                       | 4DW91-63 | 4DW91A63 | 4DW81-46 | 4DW81-49 |
| 1    | 1308000—B01—0000  | Ventilador            | 1        | 1        | 1        | 1        |
|      | 1308010—B01—0000  | Ventilador            | 1        | 1        | 1        | 1        |
|      | 1308010—B01—0000N | Ventilador            | 1        | 1        | 1        | 1        |
| 2    | 1308032—B01—0000  | Correa del ventilador | 1        |          | 1        | 1        |
|      | 1308032-B45—0000  | Correa del ventilador |          | 1        |          |          |
| 3    | 1308001—B45—0000  | Tapa frontal          |          | 1        |          |          |
| 4    | Q1460870          | Tornillo              |          | 4        |          |          |
|      |                   | Arandela resorte      |          |          |          |          |

## 24. Alternador

24. Alternador



24. Alternador

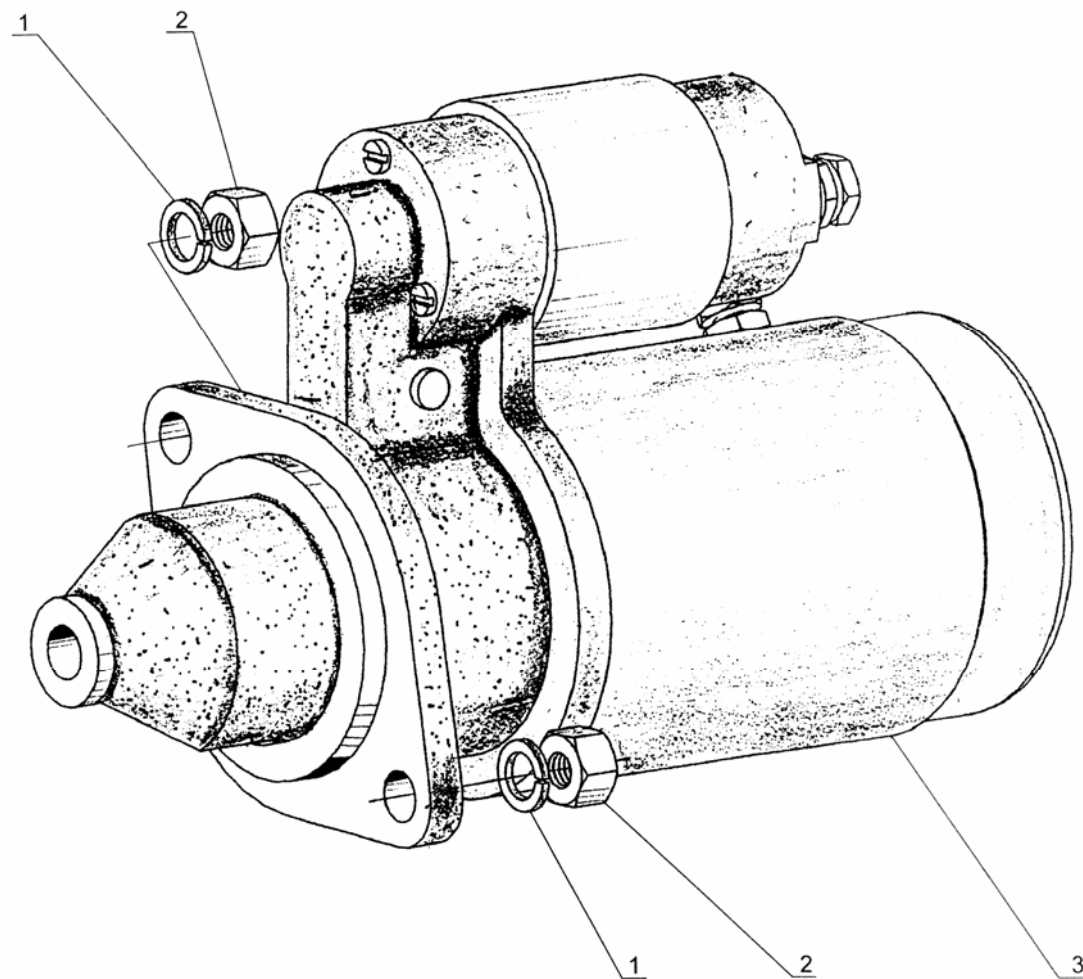
| Item | Código           | Descripción                      | Cantidad |          |          |          |
|------|------------------|----------------------------------|----------|----------|----------|----------|
|      |                  |                                  | 4DW91-63 | 4DW91A63 | 4DW81-46 | 4DW81-49 |
|      | 3701000-B01-0000 | Alternador                       | 1        |          | 1        | 1        |
|      | 3701000-B45-0000 | Alternador                       |          | 1        |          |          |
| 1    | 3701010-B01-0000 | Alternador                       | 1        |          | 1        | 1        |
|      | 3701010-B45-0000 | Alternador                       |          | 1        |          |          |
| 2    | Q150B0820        | Tornillo                         | 1        | 1        | 1        | 1        |
|      | Q150B0825        | Tornillo                         | 1        | 1        | 1        | 1        |
| 3    | Q40308           | Arandela resorte                 | 3        | 3        | 3        | 3        |
| 4    | 3701101-B01-0000 | Arandela                         | 1        | 1        | 1        | 1        |
| 5    | 3701325-B01-0000 | Conjunto buje soporte alternador | 1        |          | 1        | 1        |
|      | 3701325BB45-0000 | Buje soporte alternador          |          | 1        |          |          |
| 12   | Q340B10          | Tornillo                         | 4        | 4        | 4        | 4        |
| 13   | Q40310           | Arandela resorte                 | 1        |          | 1        | 1        |
| 14   | Q40110           | Arandela                         | 2        | 2        | 2        | 2        |
|      |                  |                                  | 4        | 4        | 4        | 4        |
|      |                  |                                  | 1        |          | 1        | 1        |
|      |                  |                                  | 2        | 2        | 2        | 2        |
|      |                  |                                  | 1        | 1        | 1        | 1        |
|      |                  |                                  | 1        | 1        | 1        | 1        |
|      |                  |                                  | 1        | 1        | 1        | 1        |

24. Alternador

| Item | Código             | Descripción            | Cantidad |          |          |          |
|------|--------------------|------------------------|----------|----------|----------|----------|
|      |                    |                        | 4DW91-63 | 4DW91A63 | 4DW81-46 | 4DW81-49 |
| 15   | 3701320 — B01—0000 | Soporte del alternador | 1        |          | 1        | 1        |
|      | 3701300—B45—0000   | Soporte del alternador |          | 1        |          |          |
| 16   | 3701321 — B01—0000 | Tubo de acero          | 1        | 1        | 1        | 1        |
| 17   | Q150B1090          | Tornillo               | 1        | 1        | 1        | 1        |
| 18   | Q150B0820          | Tornillo               | 2        | 2        | 2        | 2        |

## 25. Motor de arranque

25. Motor de arranque



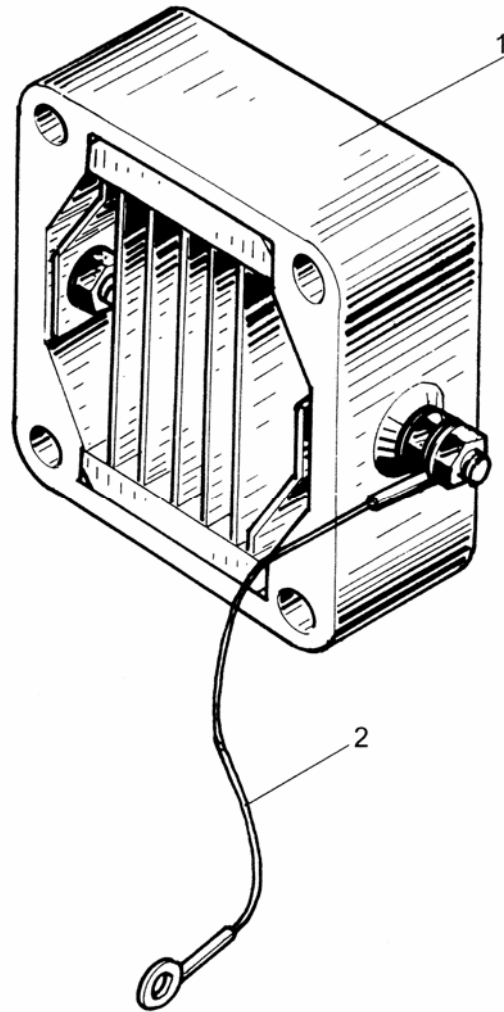
25. Motor de arranque

| Item | Código           | Descripción       | Cantidad |          |          |          |
|------|------------------|-------------------|----------|----------|----------|----------|
|      |                  |                   | 4DW91-63 | 4DW91A63 | 4DW81-46 | 4DW81-49 |
|      | 3708000—B01—0000 | Motor de arranque | 1        | 1        | 1        | 1        |
| 1    | Q40312           | Arandela resorte  | 2        | 2        | 2        | 2        |
| 2    | Q340B12          | Tornillo          | 2        | 2        | 2        | 2        |
| 3    | 3708010-B01—0000 | Motor de arranque | 1        | 1        | 1        | 1        |



## 26. Calentador de aire

26. Calentador de aire

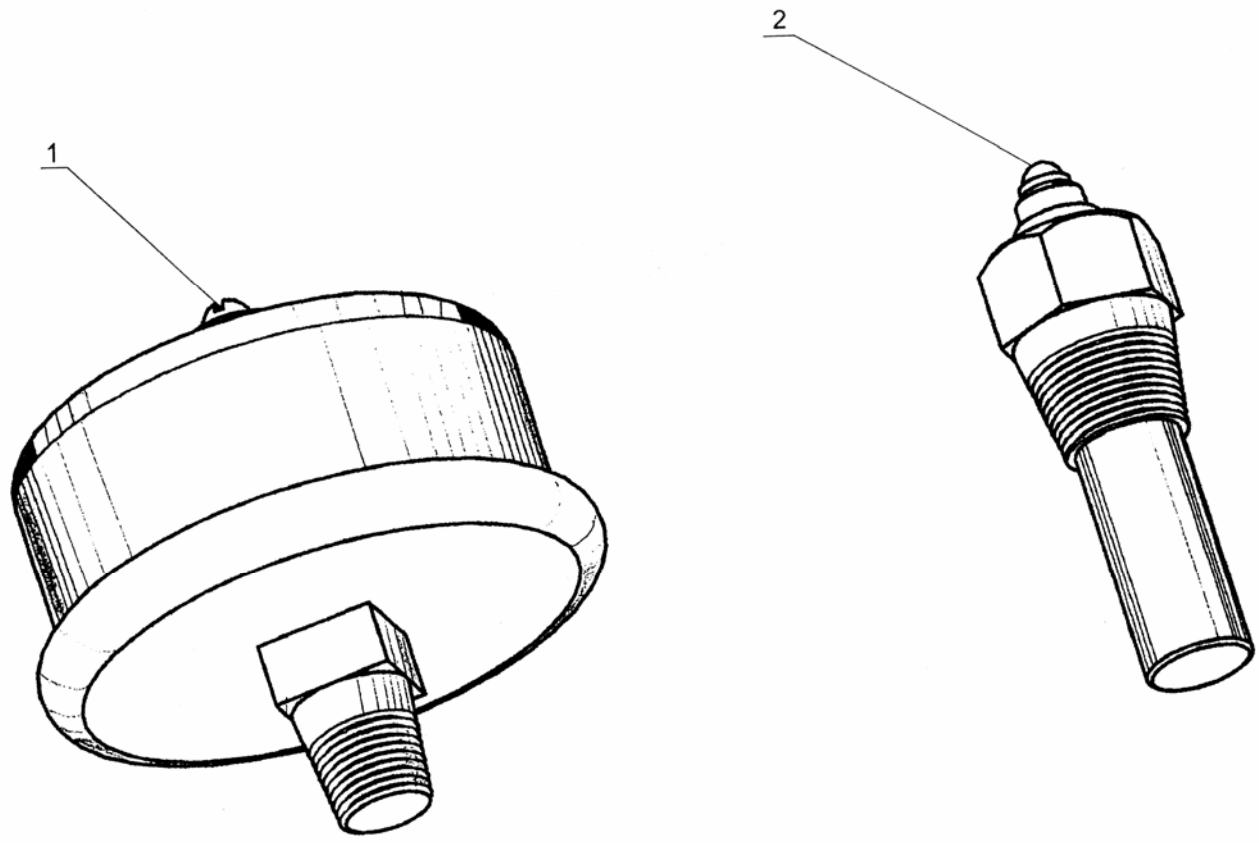


26. Calentador de aire

| Irem | Código           | Descripción                 | Cantidad |          |          |          |
|------|------------------|-----------------------------|----------|----------|----------|----------|
|      |                  |                             | 4DW91-63 | 4DW91A63 | 4DW81-46 | 4DW81-49 |
|      | 3750000—B01—0000 | Conjunto calentador de aire | 1        | 1        | 1        | 1        |
| 1    | 3750010—B01—0000 | Calentador de aire          | 1        | 1        | 1        | 1        |
| 2    | 3750020—B01—0000 | Cable de conexión           | 1        | 1        | 1        | 1        |

## 27. Medidores

27. Medidores



27. Medidores

| Ithem | Código           | Descripción                              | Cantidad |          |          |          |
|-------|------------------|--|----------|----------|----------|----------|
|       |                  |  | 4DW91-63 | 4DW91A63 | 4DW81-46 | 4DW81-49 |
|       | 3800000-B01-0000 | Medidores                                | 1        | 1        | 1        | 1        |
| 1     | 3810020-B01-0000 | Sensor - Medidor de presión del aceite   | 1        | 1        | 1        | 1        |
| 2     | 3808010-B01-0000 | Sensor - Medidor de temperatura del agua | 1        | 1        | 1        | 1        |