

|  |   |    |
|--|---|----|
| <b>ASCA</b><br>numatics                | INSTALLATION AND MAINTENANCE INSTRUCTIONS         | GB |
|  | INSTRUCTIONS D'INSTALLATION ET DE MAINTENANCE     | FR |
|  | INBETRIEBNAHME - UND WARTUNGSANLEITUNG            | DE |
|  | INSTRUCCIONES DE PUESTA EN MARCHA Y MANTENIMIENTO | ES |
|  | ISTRUZIONI DI MESSA IN SERVIZIO E MANUTENZIONE    | IT |
|  | ALGEMENE INSTALLATIE- EN ONDERHOUDSINSTRUCTIES    | NL |
|  | INSTALLASJONS- OG VEDLIKEHOLDSINSTRUKSER          | NO |
|  | INSTALLATIONS- OCH UNDERHÅLLSINSTRUKTIONER        | SE |
|  | ASENNUS - JA HUOLTO-OHJEET                        | FI |
|  | INSTALLATIONS - OG VEDLIGEHOIDSANVISNINGER        | DK |
|  | INSTRUÇÕES DE INSTALAÇÃO E MANUTENÇÃO             | PT |
|  | ΟΔΗΓΙΕΣ ΤΟΠΟΘΕΤΗΣΗΣ ΚΑΙ ΣΥΝΤΗΡΗΣΗΣ                | GR |
|  | POKRYNY PRO INSTALACI A ÚDRŽBU                    | CZ |
| INSTRUKCJA MONTAŻU I KONSERWACJI       | PL  |    |
| TELEPÍTÉSI ÉS KARBANTARTÁSI ÚTMUTATÓ   | HU  |    |
| Инструкция по установке и обслуживанию | RU  |    |

### ISO 15552 cylinders

# 453



# 454



# 450



522807-001 / B  
Availability, design and specifications are subject to change without notice. All rights reserved.



### Temperatures

453  
454  
450

STORAGE CONDITIONS



(-40°C)



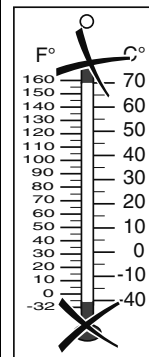
≤ +70°C  
(+120°C = "HTP")



humidity relative  
≤ 95%



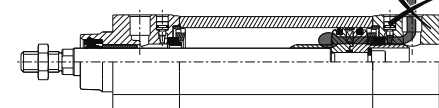
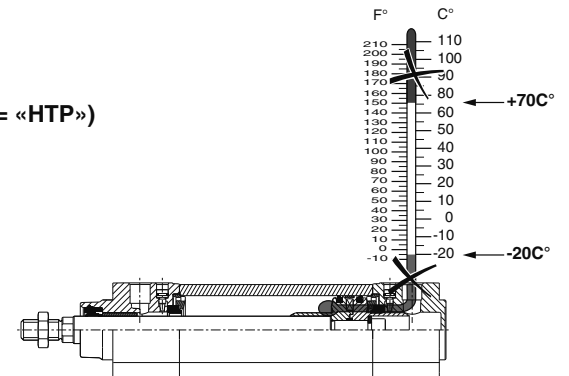
OPERATING CONDITIONS



+70°C  
(+120°C = «HTP»)



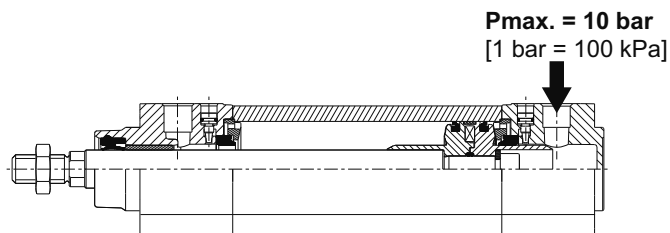
-20°C



## Characteristics

453  
454  
450

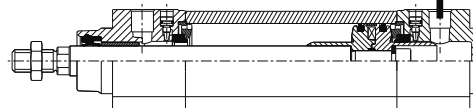
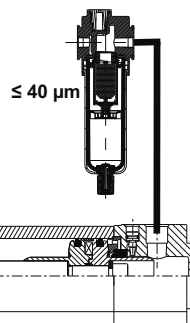
### OPERATING PRESSURE



ISO 8573-1 (2010) ]: Level 7.4.4



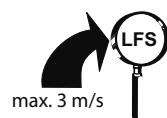
AIR  
NEUTRAL GASES



### AIR QUALITY

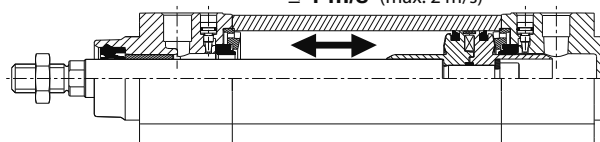
### LIFE CYCLE

LFS  
453  
450  
~~454~~



Long Life

$\leq 1 \text{ m/s}$  (max. 2 m/s)



### LUBRICATING OIL

Non-detergent oil without aggressive additives

VG 32 class (ISO 3448)

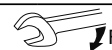
Viscosity 29 to 35 cSt ( $\text{mm}^2/\text{s}$ ) at 40°C

Silicone-base lubricants



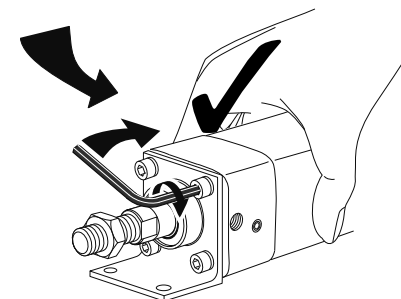
## Characteristics

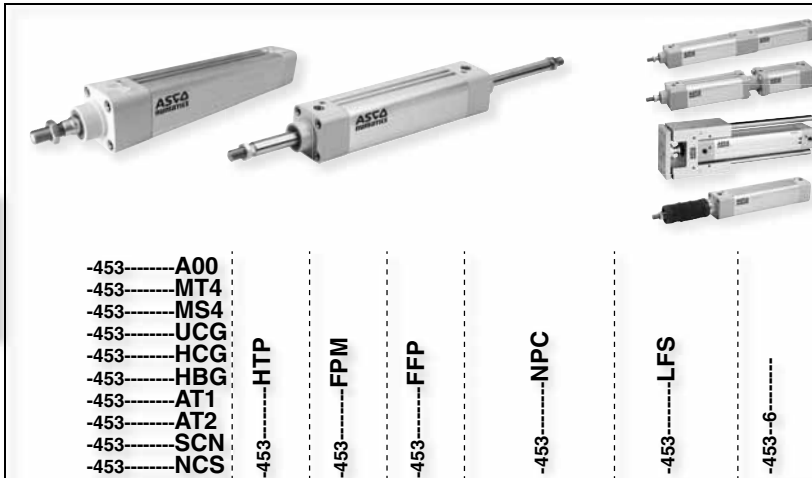
453  
454  
450



| Ø (mm)    | N.m  | Inch.pounds |
|-----------|------|-------------|
| 32 - 40   | 7    | 31,74       |
| 50 - 63   | 13,5 | 119,07      |
| 80 - 100  | 27,5 | 242,55      |
| 125       | 60   | 529,2       |
| 160 - 200 | 100  | 882         |
| 250 - 320 | 300  | 2646        |

### MOUNTINGS



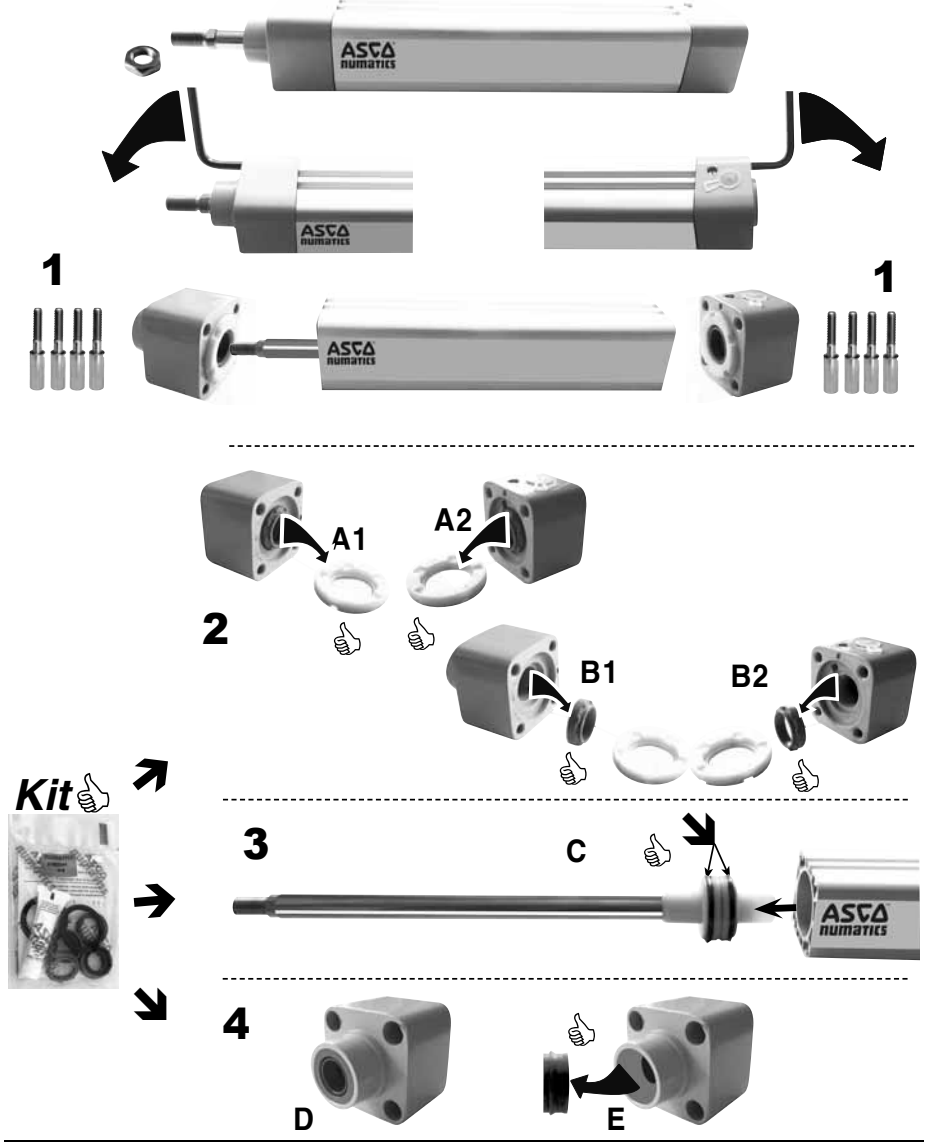
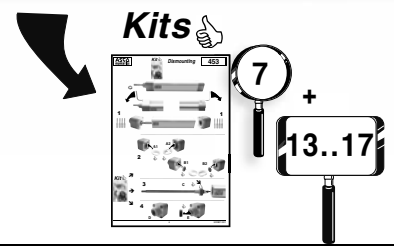


- 453-----A00
  - 453-----MT4
  - 453-----MS4
  - 453-----UCG
  - 453-----HCG
  - 453-----HBG
  - 453-----AT1
  - 453-----AT2
  - 453-----SCN
  - 453-----NCS
- |              |              |              |              |              |            |
|--------------|--------------|--------------|--------------|--------------|------------|
| -453-----HTP | -453-----FPM | -453-----FFP | -453-----NPC | -453-----LFS | -453-----6 |
|--------------|--------------|--------------|--------------|--------------|------------|

| Ø<br>(mm) | 1+2+3+4+ grease h |          |                     |          |          |          |                 |          |                              |
|-----------|-------------------|----------|---------------------|----------|----------|----------|-----------------|----------|------------------------------|
| 32        | 97802343          | 97802736 | .... <sup>(2)</sup> | 97802229 | 97802238 | 97802247 | M454A3RA0000A00 | 97802060 | -                            |
| 40        | 97802344          | 97802737 | .... <sup>(2)</sup> | 97802230 | 97802239 | 97802248 | M454A4RA0000A00 | 97802061 | -                            |
| 50        | 97802345          | 97802738 | .... <sup>(2)</sup> | 97802231 | 97802240 | 97802249 | M454A5RA0000A00 | 97802062 | -                            |
| 63        | 97802346          | 97802739 | .... <sup>(2)</sup> | 97802232 | 97802241 | 97802249 | M454A5RA0000A00 | 97802887 | .... <sup>(2)</sup> 97802333 |
| 80        | 97802347          | 97802740 | .... <sup>(2)</sup> | 97802233 | 97802242 | 97802250 | M454A8RA0000A00 | 97802888 | .... <sup>(2)</sup> 97802334 |
| 100       | 97802259          | 97802741 | .... <sup>(2)</sup> | 97802234 | 97802243 | 97802250 | M454A8RA0000A00 | -        | 97802335                     |

grease h (11 cm³) = 97802100

ROD  
+  
PISTON UNIT <sup>(2)</sup> Specify stroke length (in mm).





454

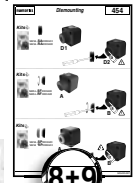


-454-----A00/SCN/AT1/AT2/LSR/LSS

15-DIGIT PRODUCT CODE

M 454 A    -    -    - 0000 A00  
 Ø (mm)  
 3 = 32  
 4 = 40  
 5 = 50  
 6 = 63  
 8 = 80  
 1 = 100

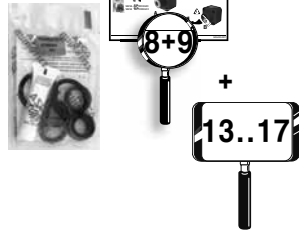
S R S R S R  
 A A F F P  
 Kits



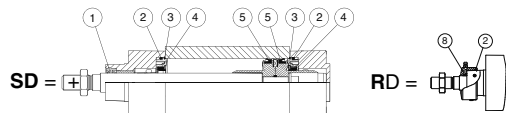
grease (11 cm³) = 97802100



|        |                 |
|--------|-----------------|
| 32-40  | P4994395723N001 |
| 50-63  | P4994395735N001 |
| 80-100 | P4994395748N001 |



Kits



|                  |                 |
|------------------|-----------------|
| Ø (mm)           |                 |
| 80               | P4995026728N001 |
| 100              | P4995025441N001 |
| 125 (Series 450) | P499502668PN001 |
| 160 (Series 450) | P499516338QN001 |
| 200 (Series 450) | P499516339RN001 |

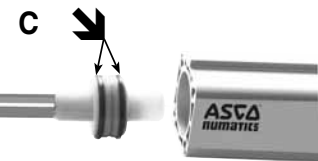
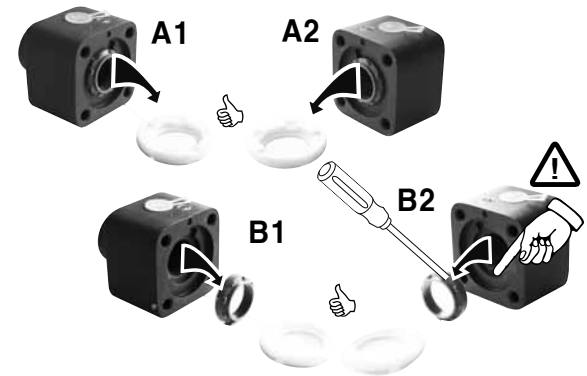


Dismounting

454



Kits



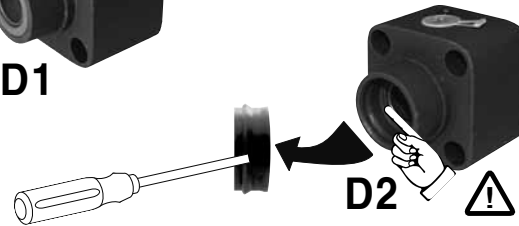
**Kits**



M454--**SA**0000A00  
M454--**RA**0000A00



**D1**



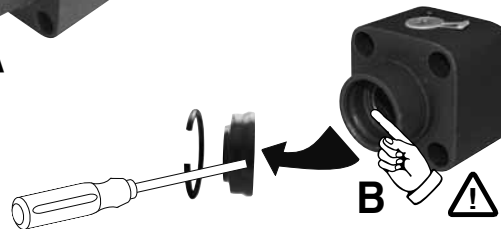
**Kits**



M454--**SF**0000A00  
M454--**RF**0000A00



**A**



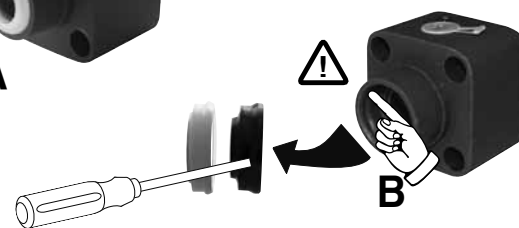
**Kits**



M454--**SP**0000A00  
M454--**RP**0000A00



**A**



**Kit**



**450**



-450-----A00  
-450-----FMT  
-450-----FST  
-450-----UCG  
-450-----HCG  
-450-----HBG  
-450-----AT1  
-450-----AT2  
-450-----NCS  
-450-----TAN

-450-----HTP

-450-----FPM

-450-----FFP

-450-----NPC

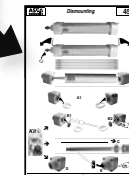
-450-----LFS

-450-----6

| Ø<br>(mm) | 1 + 2 + 3 + 4 + |          |     |     |          |          | ↓        | ↓               | ↓        |          |
|-----------|-----------------|----------|-----|-----|----------|----------|----------|-----------------|----------|----------|
|           | 1               | 2        | 3   | 4   | 3        | 2        |          |                 |          |          |
| 32        | 97802343        | 97802736 | ... | (2) | 97802229 | 97802238 | 97802247 | M454A3RA0000A00 | 97802060 | -        |
| 40        | 97802344        | 97802737 | ... | (2) | 97802230 | 97802239 | 97802248 | M454A4RA0000A00 | 97802061 | -        |
| 50        | 97802345        | 97802738 | ... | (2) | 97802231 | 97802240 | 97802249 | M454A5RA0000A00 | 97802062 | -        |
| 63        | 97802346        | 97802739 | ... | (2) | 97802232 | 97802241 | 97802249 | M454A5RA0000A00 | 97802887 | 97802333 |
| 80        | 97802347        | 97802740 | ... | (2) | 97802233 | 97802242 | 97802250 | M454A8RA0000A00 | 97802888 | 97802334 |
| 100       | 97802259        | 97802741 | ... | (2) | 97802234 | 97802243 | 97802250 | M454A8RA0000A00 | -        | 97802335 |
| 125       | 97802260        | 97802742 | ... | (2) | 97802235 | 97802244 | 97802251 | M400APRA0000A00 | -        | 97802336 |
| 160       | 97802261        | 97802743 | ... | (2) | 97802236 | 97802245 | 97802252 | M400AQRA0000A00 | -        | -        |
| 200       | 97802262        | 97802744 | ... | (2) | 97802237 | 97802246 | 97802252 | M400AQRA0000A00 | -        | -        |

(11 cm³) = **97802100**

ROD  
+  
PISTON  
UNIT (2) Specify stroke length (in mm).

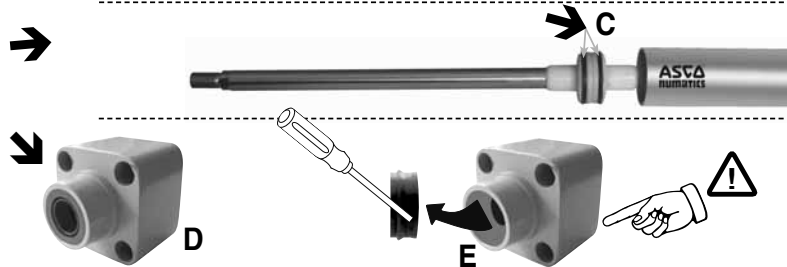
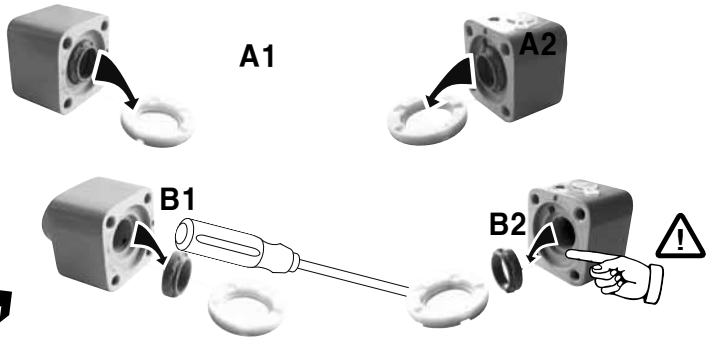


**12..17**



# Dismounting

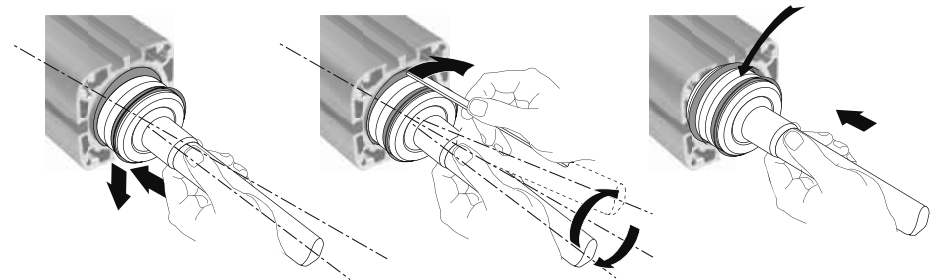
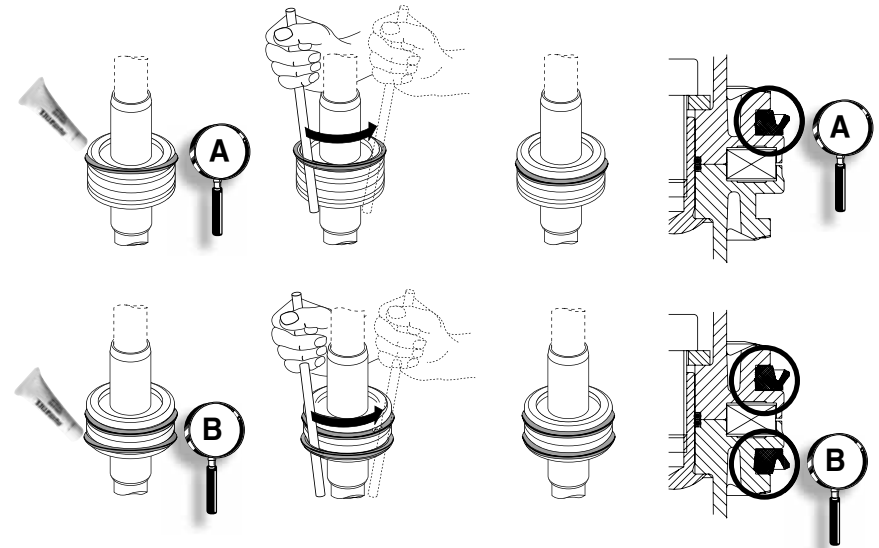
450



# Reassembly


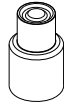
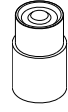
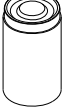


453-454-450

I

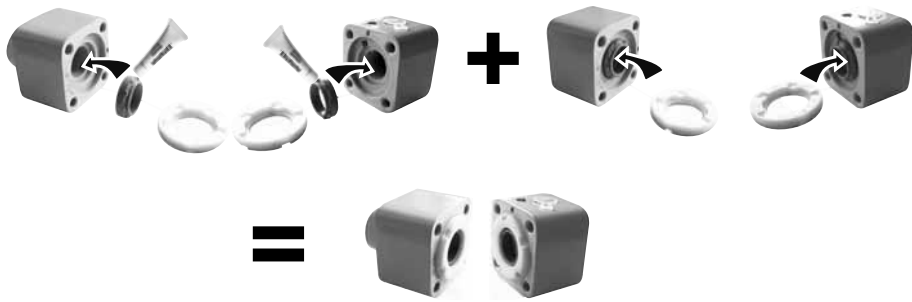


**Reassembly 453-454-450**

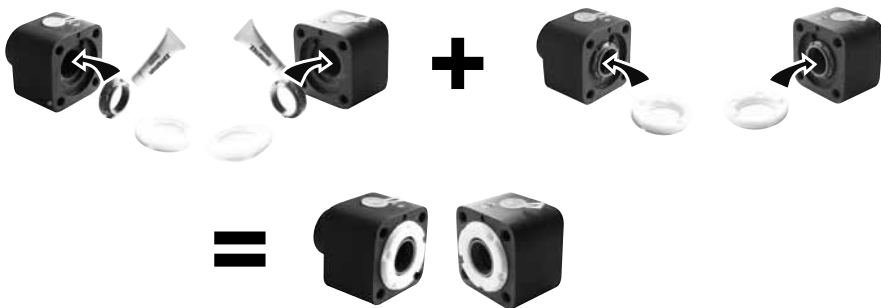
LFS (453-450) + 454

|   |                       |   |   |   |   |   |
|---|-----------------------|---|---|---|---|---|
| <b>Kit</b><br> | <b>mounting tools</b> |  |  |  |  |  <b>II</b> |
|   | <b>Scraper</b>        | Ø32   | Ø40   | Ø50<br>Ø63  | Ø80<br>Ø100   |   |

**453 + 450**


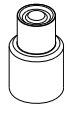
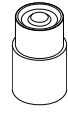
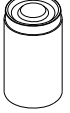




**454**

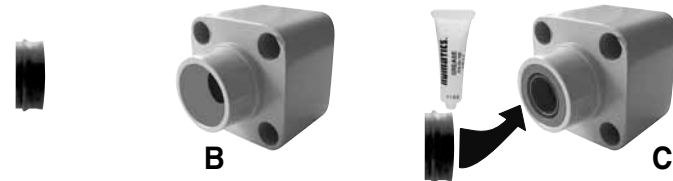


**Reassembly 453-454-450**

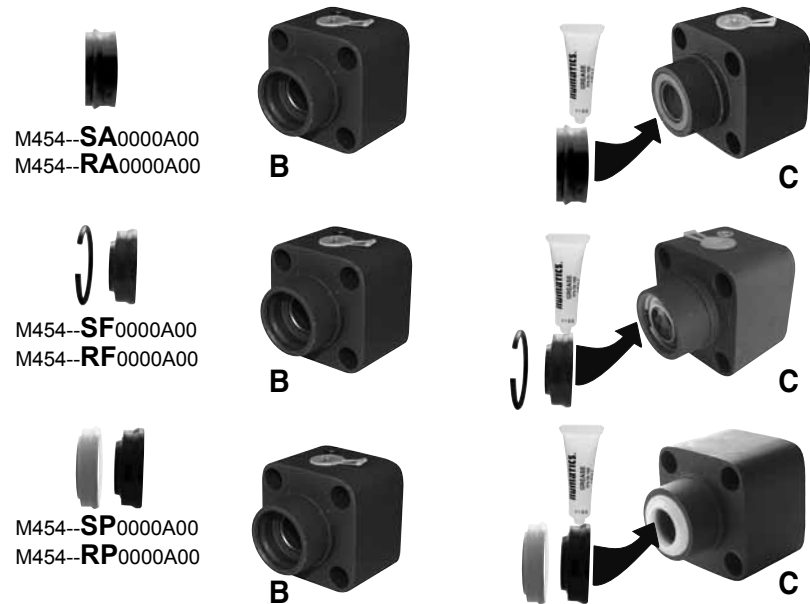
LFS (453-450) + 454

|   |                       |   |   |   |   |   |
|---|-----------------------|---|---|---|---|---|
| <b>Kit</b><br> | <b>mounting tools</b> |  |  |  |  |  <b>II</b> |
|   | <b>Scraper</b>        | Ø32   | Ø40   | Ø50<br>Ø63  | Ø80<br>Ø100   |   |

**453 + 450**



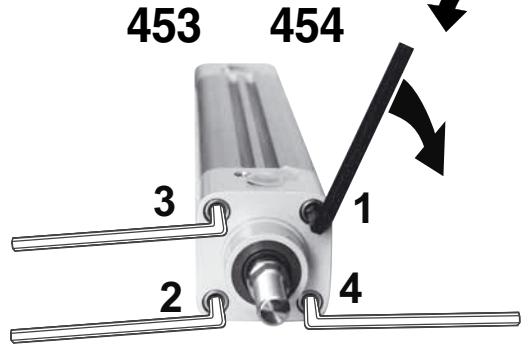
**454**




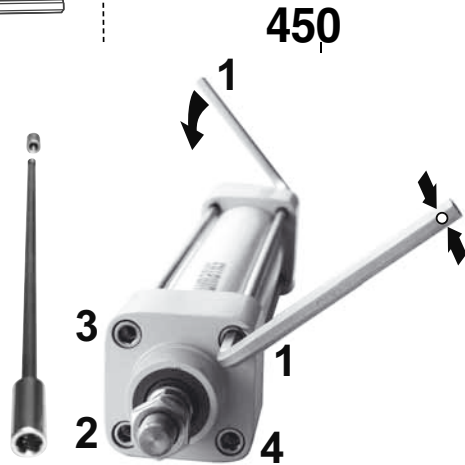




# Reassembly 453-454-450

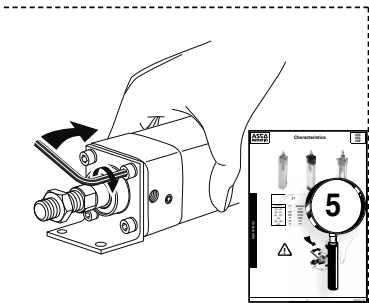
## IV



| 453 - 454 |  F |        |             |
|-----------|---|--------|-------------|
|           | Ø (mm)  | N.m    | Inch.pounds |
|           | 32 - 40   | 7      | 31,74       |
|           | 50 - 63   | 13,5   | 119,07      |
| 80 - 100  | 27,5  | 242,55 |             |



| 450       |  F |        |             |  epoxy |             |
|-----------|---|--------|-------------|--|-------------|
|           | Ø (mm)  | N.m    | Inch.pounds | N.m  | Inch.pounds |
|           | 32  | 7      | 31.74       | 1,5  | 13.23       |
|           | 40  | 7      | 31.74       | 3  | 26.46       |
| 50        | 13,5  | 119.07 | 4           | 35.28  |             |
| 63        | 13,5  | 119.07 | 5           | 44.1   |             |
| 80        | 27,5  | 242.55 | 8           | 70.56  |             |
| 100       | 27,5  | 242.55 |             |  |             |
| 125       | 60  | 529.2  |             |  |             |
| 160 - 200 | 100   | 882    |             |  |             |



# Reassembly 453-454-450

## V







