

PARTS & SERVICE NEWS

REF NO. AA03155B

DATE May 5, 2004

(C)

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This Parts & Service News supersedes AA03155 dated Nov. 4, 2003, AA03155A dated April 19, 2004 and AT04025 dated Feb. 5, 2004, all three should be discarded.

SUBJECT: REWORK PROCEDURE TO IMPROVE DURABILITY OF FRONT AND REAR SUSPENSION

PURPOSE: To introduce rework procedure to improve durability of the front and rear suspension on dump trucks.

APPLICATION: Komatsu Mechanical Drive Dump Trucks:
 330M: 24120 - 24605, A10190 - A10223, A10225 - A10227,
 A10231 and A10232
 HD785-3: S/N 2487 and UP
 HD785-5: 4001 - 4445
 HD785-5LC: A10144, A10224, A10228 - A10270, A10275 - A10315
 HD985-3: 1001 and UP
 HD985-5: 1001 - 1070

FAILURE CODE: 5A00AA

DESCRIPTION: Front suspension kit (XK0257) and rear suspension kit (XK0261)

This Parts & Service News will introduce necessary improvements parts and rework procedure to improve durability of the front and rear suspension on the specified dump trucks when they are being used in severe conditions, such as overloaded, traveling on rough roads, high speed traveling, operating in high outside air temperatures, etc.). Applications where average vehicle speed (odometer rating/SMR) is greater than 7 MPH will benefit from these kits and rework procedure.

NOTE: A special tool is required to install the new bushing inside the front suspension. See page 9 (Figure 1) for details on how to fabricate the tool locally.

NOTE: During re-assembly, the front suspension requires a special sealant (LG-6), part number is TB1215.

▲ CAUTION

Existing suspensions should not be installed (mixed with) with the newest suspensions or ones that have been reworked with parts introduced in this Parts & Service News. Front suspensions and rear suspensions must be similar to each other as the charging heights are different after this rework is performed.

2. List of Parts

No.	Part No.	Part Name	Qty	Remarks
Front Suspension Assembly				
	561-50-6T400 (EK1143)	Front Suspension (Front Suspension)	2 (2)	Standard Suspension (330M: 24482 & UP, A10190 & UP) (HD785-5LC: A10144, A10224 & UP)
	561-50-6T400 (561-50-61005)	Front Suspension (Front Suspension)	2 (2)	Standard Suspension (330M: 24120 - 24448)
	561-50-6T700 (561-50-67001)	Front Suspension (Front Suspension)	2 (2)	Standard Suspension plus ABS
1	XK0257	Front Suspension Kit	2	Includes Item No. 2 thru 9
2	707-51-18640	Ring, Buffer	2	
3	561-50-6A220 (569-50-11220)	Bushing (Bushing)	2 (2)	
4	561-50-65140 (561-50-61143)	Flange (Flange)	2 (2)	
5	561-50-6A390	Spacer	2	
6	01011-81205 (01010-81290)	Bolt (Bolt)	15 (15)	
7	07000-15210 (07000-15210)	O-ring (O-ring)	2 (2)	
8	07001-05201 (0700-15210)	Ring, backup (Ring, backup)	2 (2)	Consumable Parts
9	561-50-61412 (561-50-61412)	Stopper (Stopper)	2 (2)	
Rear Suspension Assembly				
10	561-50-6T901 (EJ7178)	Rear Suspension	2 (2)	(330M: A10190 & UP) (HD785-5LC: A10144, A10224 & UP)
10	561-50-6T901 (561-50-62003)	Rear Suspension	2 (2)	(330M: 24120 - 24605)
10	561-50-6T901 (561-50-6B190)	Rear Suspension	2 (2)	Without PLM
Rear Suspension Parts				
11	XK0261	Rear Suspension Kit	2	Includes Items 12 thru 20
12	707-15-20640	Ring, buffer	2	
13	561-50-6B330 (568-50-11330)	Bushing (Bushing)	2 (2)	
14	561-50-6B190 (561-50-6A150)	Flange (Flange)	2 (2)	
15	561-50-6B930	Spacer	2	
16	01011-81420 (01011-81400)	Bolt (Bolt)	16 (16)	

17	07000-15240 (07000-15240)	O-ring (O-ring)	2 (2)	Consumable Parts
18	07001-15240 (07001-05240)	Ring, backup (Ring, backup)	2 (2)	
19	561-50-6T131 (561-50-6B130)	Rod (Rod)	2 (2)	Additional local work required
20	561-93-73960 (561-93-63960)	Plate, decal (Plate, decal)	2 (2)	English version
20	561-93-78960 (561-93-68961)	Plate, decal (Plate, decal)	2 (2)	Indonesian version

<https://hespareparts.com/>

3. Details of the modification

(1) Front suspension

	Improved suspension	Current suspension																												
Contents of the modification	<ul style="list-style-type: none"> The material of the bushing has been changed.(DD ← DU) A buffer ring has been added. The flange has been changed. The length of the flange mounting bolt has been changed. A spacer has been added. 																													
Structure																														
Part No.	<table border="0"> <tr><td>2. Buffer ring</td><td>707-51-18640</td></tr> <tr><td>3. Bushing</td><td>561-50-6A220</td></tr> <tr><td>4. Flange</td><td>561-50-65140</td></tr> <tr><td>5. Spacer</td><td>561-50-6A390</td></tr> <tr><td>6. Bolt</td><td>01011-81205</td></tr> <tr><td>7. O-ring</td><td>07000-15210</td></tr> <tr><td>8. Backup ring</td><td>07001-05210</td></tr> <tr><td>9. Stopper</td><td>561-50-61412</td></tr> </table>	2. Buffer ring	707-51-18640	3. Bushing	561-50-6A220	4. Flange	561-50-65140	5. Spacer	561-50-6A390	6. Bolt	01011-81205	7. O-ring	07000-15210	8. Backup ring	07001-05210	9. Stopper	561-50-61412	<table border="0"> <tr><td>3. Bushing</td><td>569-50-11220</td></tr> <tr><td>4. Flange</td><td>561-50-61143</td></tr> <tr><td>6. Bolt</td><td>01010-81290</td></tr> <tr><td>7. O-ring</td><td>07000-15210</td></tr> <tr><td>8. Backup ring</td><td>07001-05210</td></tr> <tr><td>9. Stopper</td><td>561-50-61412</td></tr> </table>	3. Bushing	569-50-11220	4. Flange	561-50-61143	6. Bolt	01010-81290	7. O-ring	07000-15210	8. Backup ring	07001-05210	9. Stopper	561-50-61412
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* No. 7, 8 and 9 parts are consumable parts.

(2) Rear suspension

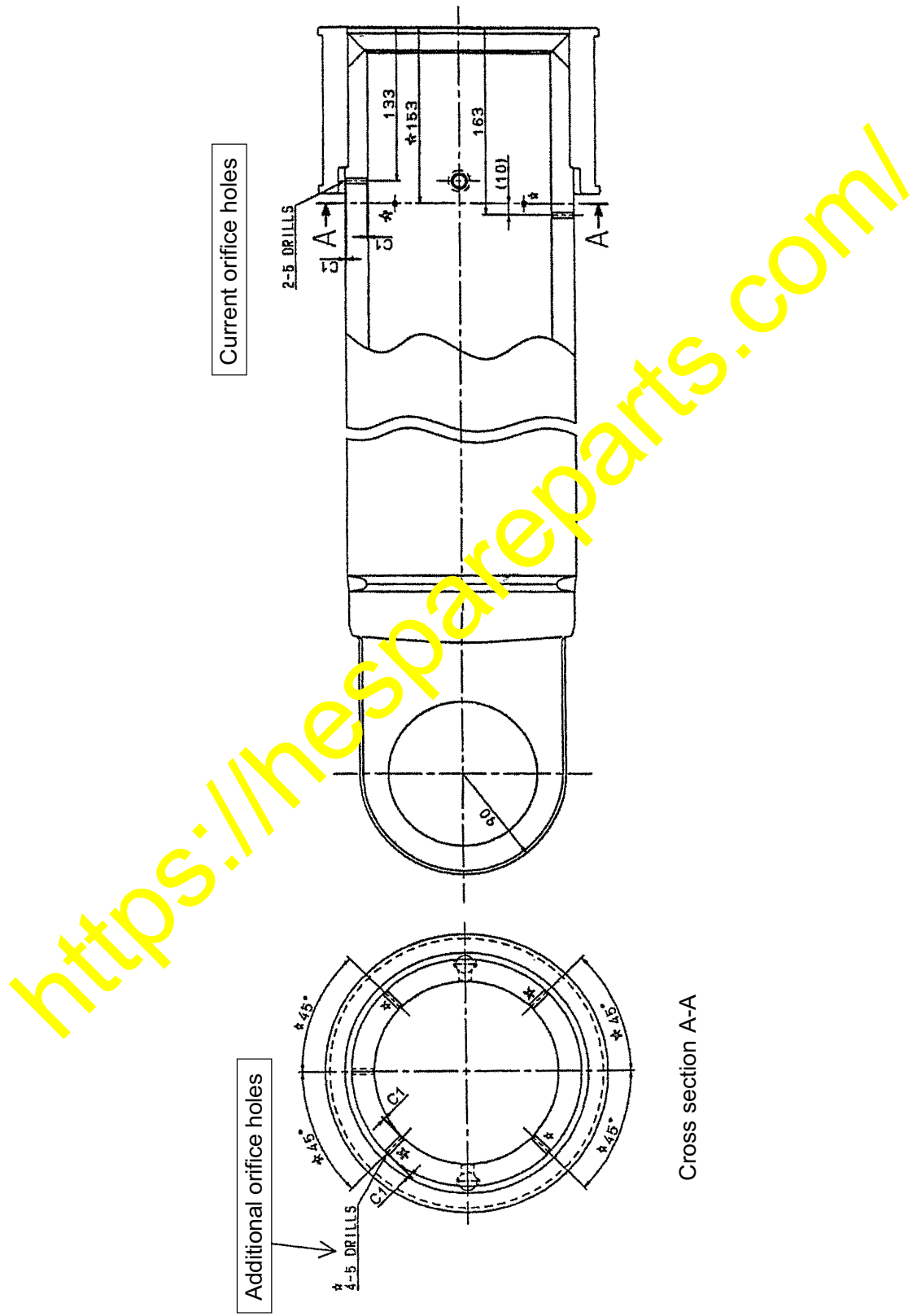
	Improved suspension	Current suspension																												
Contents of the modification	<ul style="list-style-type: none"> The material of the bushing has been changed.(DD ← DU) A buffer ring has been added. The flange has been changed. The length of the flange mounting bolt has been changed. Number of orifice holes in the rod are increased by additional working. (2 places → 6 places) The decal plate has been changed. 																													
Structure																														
Part No.	<table border="0"> <tr><td>12. Buffer ring</td><td>707-51-20640</td></tr> <tr><td>13. Bushing</td><td>561-50-6B330</td></tr> <tr><td>14. Flange</td><td>561-50-6B190</td></tr> <tr><td>15. Spacer</td><td>561-50-6B390</td></tr> <tr><td>16. Bolt</td><td>01011-81420</td></tr> <tr><td>17. O-ring</td><td>07000-15240</td></tr> <tr><td>18. Backup ring</td><td>07001-05240</td></tr> <tr><td>19. Rod</td><td>561-50-6T131</td></tr> </table>	12. Buffer ring	707-51-20640	13. Bushing	561-50-6B330	14. Flange	561-50-6B190	15. Spacer	561-50-6B390	16. Bolt	01011-81420	17. O-ring	07000-15240	18. Backup ring	07001-05240	19. Rod	561-50-6T131	<table border="0"> <tr><td>13. Bushing</td><td>568-50-11330</td></tr> <tr><td>14. Flange</td><td>561-50-6A150</td></tr> <tr><td>16. Bolt</td><td>01011-81400</td></tr> <tr><td>17. O-ring</td><td>07000-15240</td></tr> <tr><td>18. Backup ring</td><td>07001-05240</td></tr> <tr><td>19. Rod</td><td>561-50-6B130</td></tr> </table>	13. Bushing	568-50-11330	14. Flange	561-50-6A150	16. Bolt	01011-81400	17. O-ring	07000-15240	18. Backup ring	07001-05240	19. Rod	561-50-6B130
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19. Rod	561-50-6B130																													

* No. 17 and 18 parts are consumable parts.

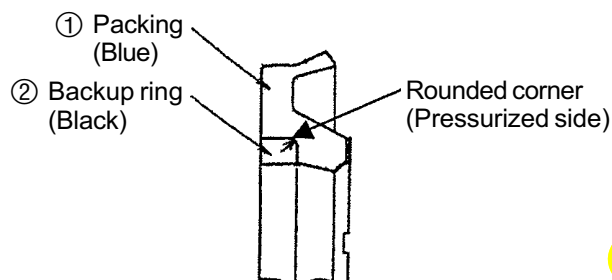
* Regarding the No. 19 part, current part can be reused after carrying out additional working.

4. Modification procedure

- (1) Carry out the disassembly and reassembly work referring to the Shop Manual when replacing the parts with the improved ones.
- (2) Add the orifice holes with a ϕ 5.0 drill at the four places marked ☆ in the drawing below of the disassembled rod (561-50-6B130).



- (3) After the additional working to add the orifice holes on the rod, remove burrs completely from the inside and outside surfaces. Also, before reassembling the rod, remove cutting chips which have entered into the piston section of the rod completely by air blow.
- (4) Since the buffer ring which is to be added newly is made of two sections of ① packing section (being colored blue) and ② backup ring section (being colored black), install the rounded corner side of the ② backup ring section into the ① packing section.



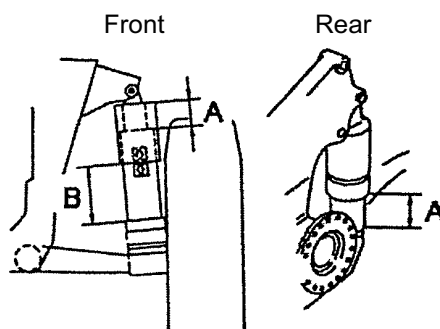
- (5) When adjusting the mounted length of the suspension cylinder after this modification work, carry out the adjustment work referring to the "Modified value" of the adjustment standard indicated in the Table below.

(Unit: mm)

Item			Vehicle model	HL785/330M	HD985
Mounted length	Front	A	Current value	262 ± 10	262 ± 10
			Modified value	246 ± 10	246 ± 10
		B	Current value	484 ± 10	484 ± 10
			Modified value	484 ± 10	484 ± 10
	Rear	A	Current value	240 ± 10	250 ± 10
			Modified value	220 ± 10	230 ± 10

Remain the same.

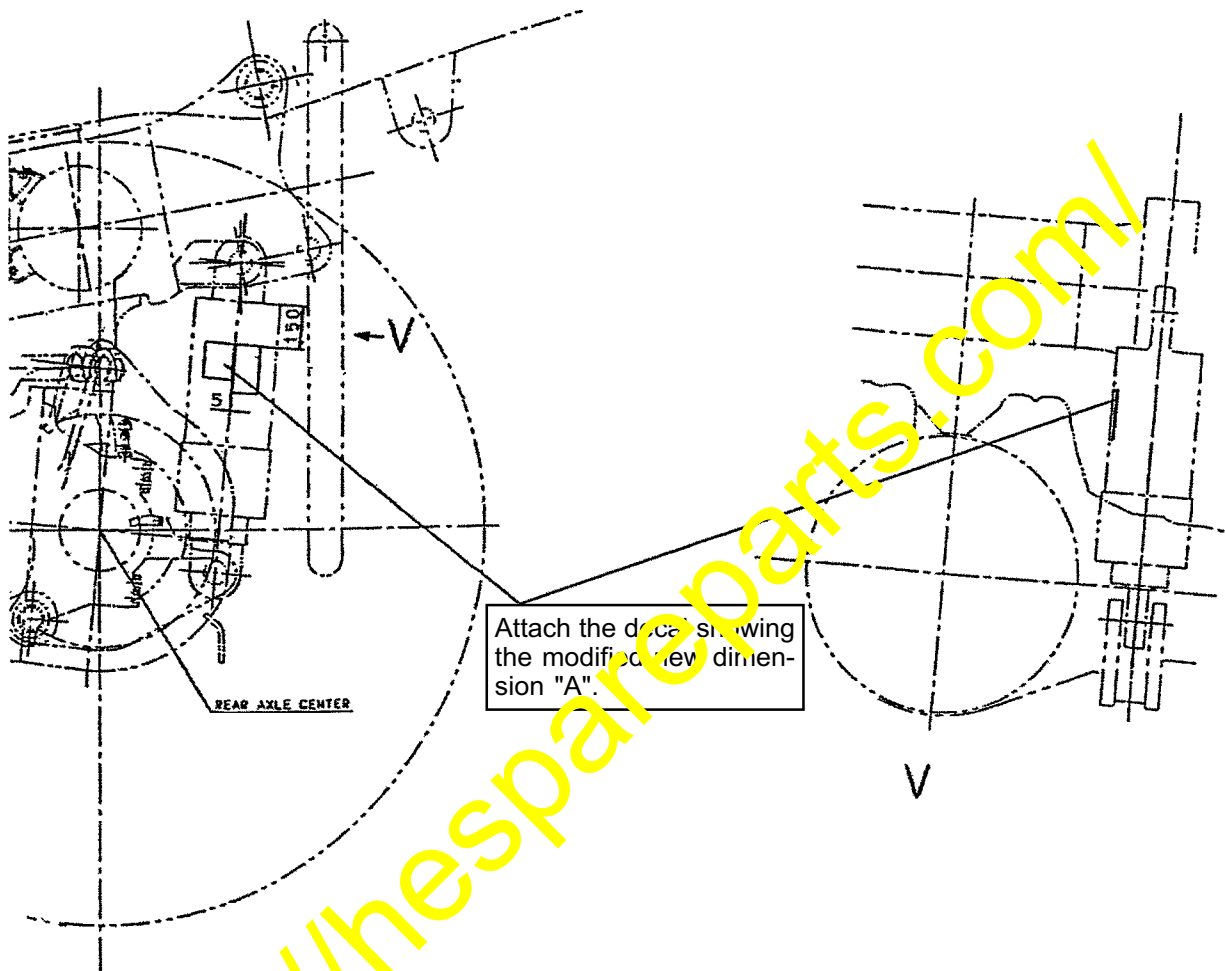
- On horizontal road surfaces
- Inloaded state



(Note) When charging the nitrogen (N₂) gas, since the gas will be dissolved into the new oil and the dimension "A" will be shortened, charge it somewhat in excess (by 20 - 30 mm).

After operating the vehicle for 24 to 48 hours, inspect the cylinders for gas leakage, oil leakage and check the dimension "A". When necessary, carry out re-adjustment of the dimension "A".

- (6) Remove the decal with the current part number and the current dimension "A" of the rear suspension and attach the decal with the new part number and the modified new dimension "A".
(1 plate each on each of the LH side and the RH side)



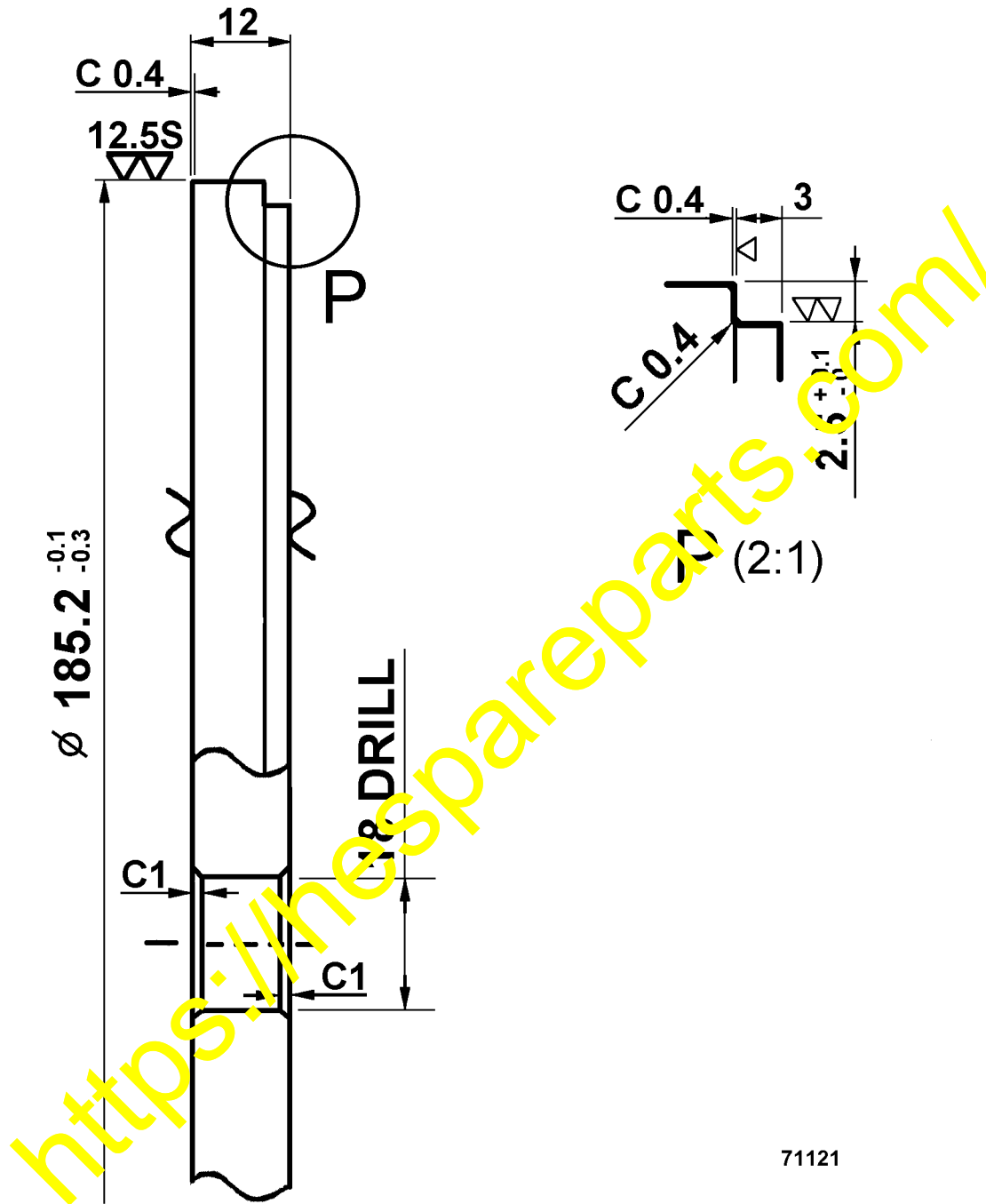


FIGURE 1. BUSHING INSTALLATION TOOL (561-99-79220)
 Material Specification: ASTM A36/A36M