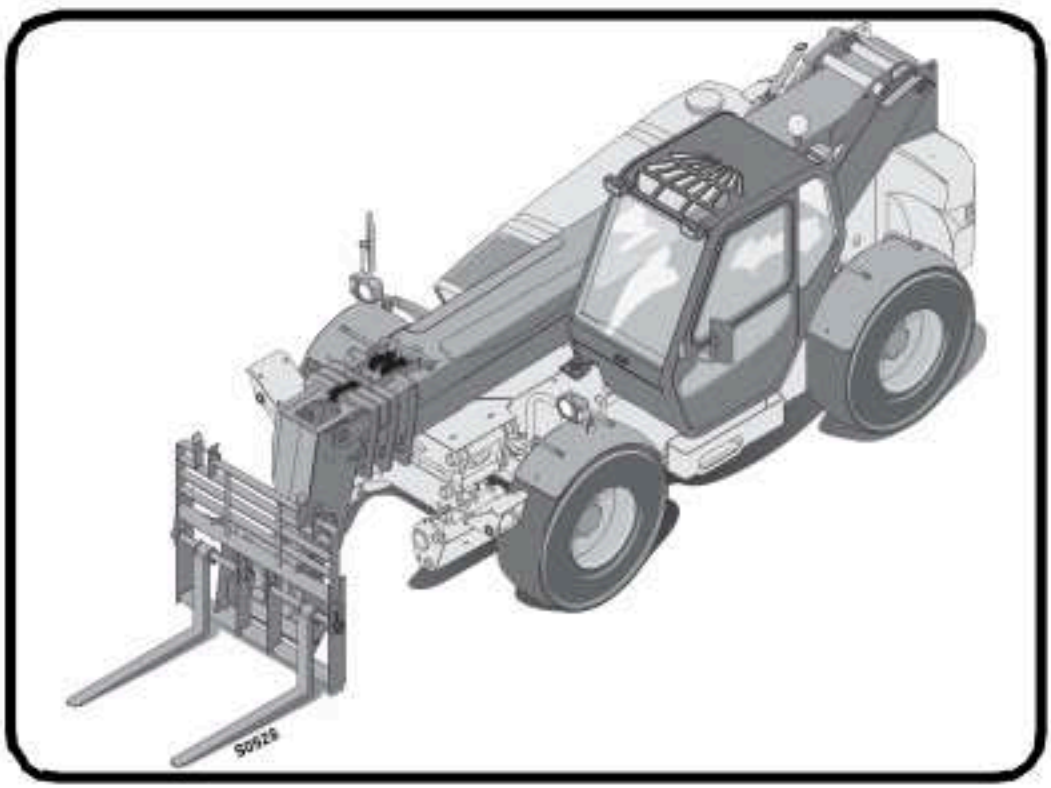
Bobcat

# Service Manual
# T40140, T40170 Telescopic Handler

**S/N A8GA11001 & Above**
**S/N A8GB11001 & Above**



**EQUIPPED WITH BOBCAT INTERLOCK CONTROL SYSTEM (BICS)**

6986768-EN (08-08) Revised (02-10)

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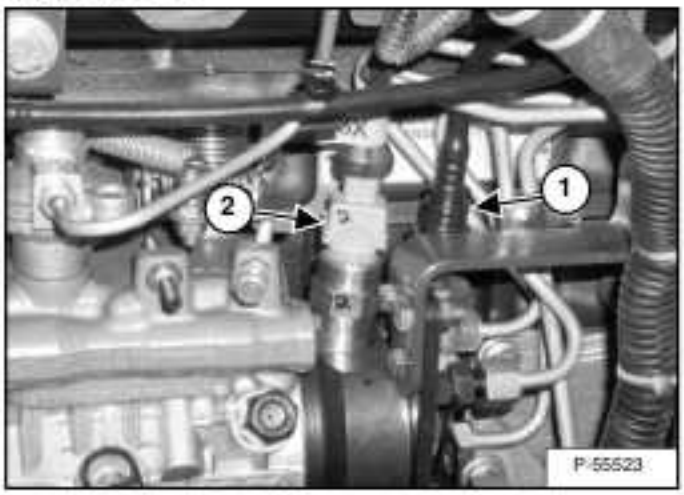
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### Fuel Injection Pump Installation (Cont'd)

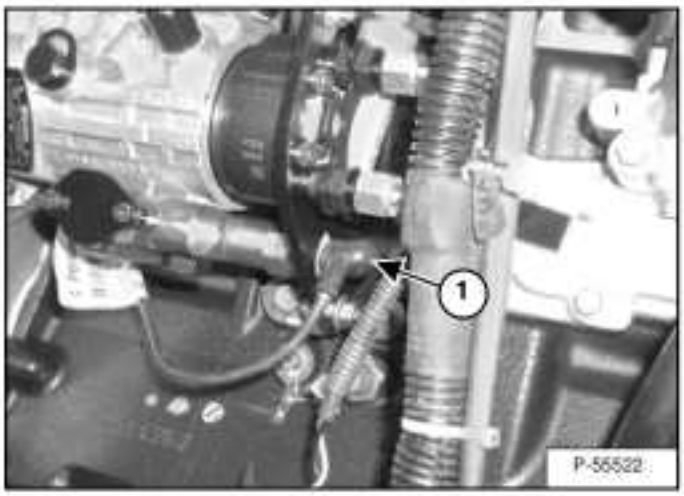
Figure 70-70-23




Install the two fuel lines (Item 1) **[Figure 70-70-22]** and **[Figure 70-70-23]**.

Install the electrical connector (Item 2) **[Figure 70-70-23]**.

Figure 70-70-24




Install the harness (Item 1) **[Figure 70-70-24]**.

Remove air from the system.

### Fuel Injectors Removal And Installation

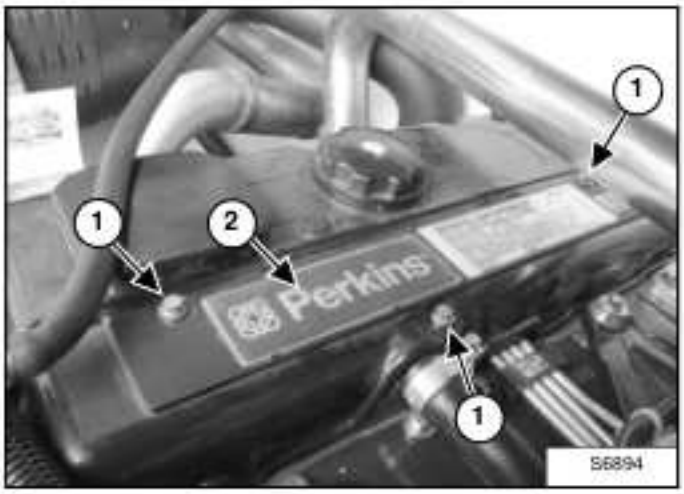
**⚠ WARNING**

**AVOID INJURY OR DEATH**

**Diesel fuel or hydraulic fluid under pressure can penetrate skin or eyes, causing serious injury or death. Fluid leaks under pressure may not be visible. Use a piece of cardboard or wood to find leaks. Do not use your bare hand. Wear safety goggles. If fluid enters skin or eyes, get immediate medical attention from a doctor familiar with this injury.**

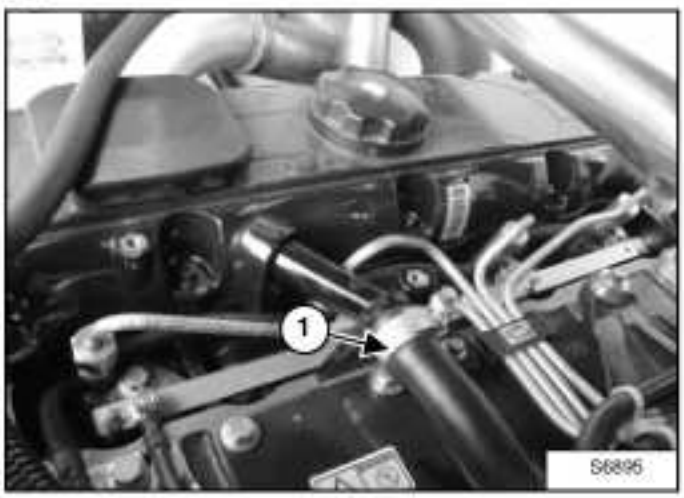
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Figure 70-70-1




Remove the three bolts (Item 1) and remove the fuel injector cover (Item 2) **[Figure 70-70-1]**.

Figure 70-70-1




Remove the breather hose (Item 1) **[Figure 70-70-1]**.



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## Valve Guides Checking

**Figure 70-100-5**

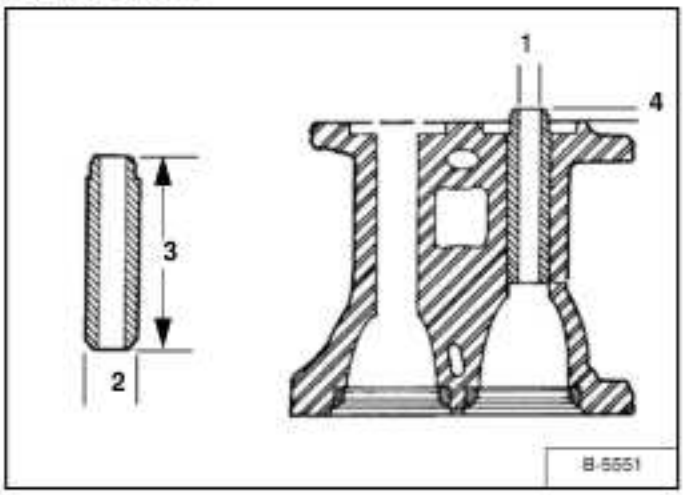
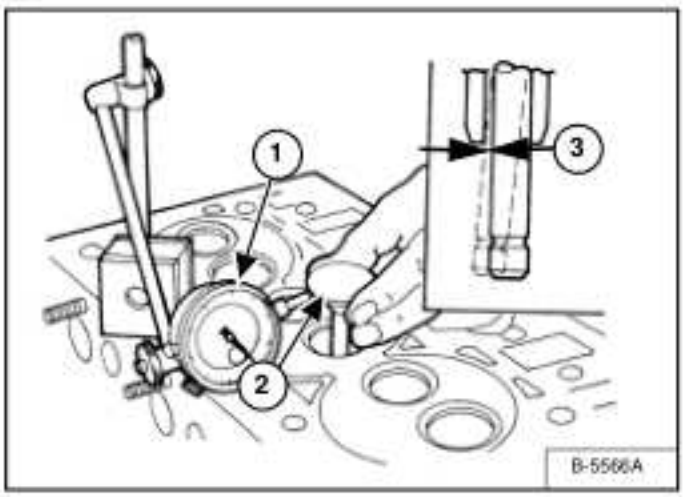



**Figure 70-100-6**




The valve guides can be checked for wear with either of the operations listed in **[Figure 70-100-5]** or **[Figure 70-100-6]**.

Use the following chart to check valve guides.

| Inside Diameter | |
|---|---|
| (Item 1) **[Figure 70-100-5]** | 0.3543-0.3552 inch (9,00-9,022 mm) |

| Outside Diameter (Item 2) **[Figure 70-100-5]** | |
|---|---|
| Intake and Exhaust | 0.5131-0.5137 inch (13,034-13,047 mm) |

Interference fit of valve guide to cylinder head: 0.0003-0.0019 inch (0,007-0,047 mm)

| Overall Diameter (Item 3) **[Figure 70-100-5]** | |
|---|---|
| Intake and Exhaust | 2.018-2.027 inch (51,00-51,50 mm) |

| Protrusion from bottom recess for valve spring; | |
|---|---|
| (Item 4) **[Figure 70-100-5]** | 0.486-0.498 inch (12,35-12,65 mm) |

To check the valve guides for wear using a valve.

Set up dial indicator gauge (Item 1) **[Figure 70-100-5]** as shown.

Lift the valve (Item 2) 0.60 inches (15,0 mm) and move the valve in and away from the gauge (Item 1) **[Figure 70-100-5]**. Record this reading.

If the clearance exceeds 0.005 inches (0,13 mm) for intake or 0.006 inches (0,15 mm) for exhaust (Item 3) **[Figure 70-100-6]** the valve guide needs to be replaced.



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## SYSTEM TROUBLESHOOTING CHART (CONT'D)

Gauge Pressure Related Troubleshooting (Cont'd)

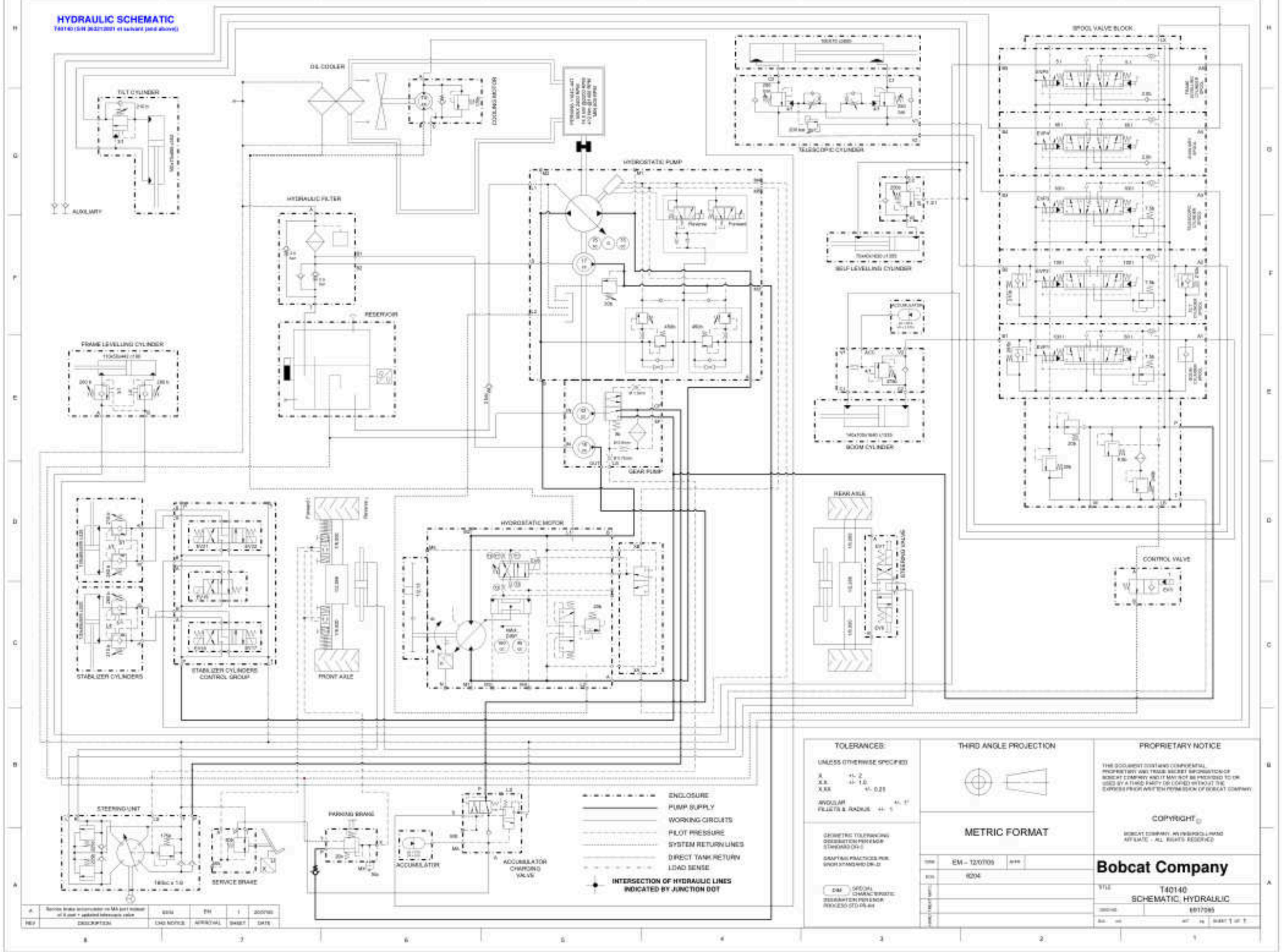
| POSSIBLE CAUSE | INSPECTION | SOLUTION |
|---|---|---|
| **High pressure side Too low.** | | |
| 1. Low refrigerant charge | The high side pressure will be low and bubbles can be present in sight glass on receiver drier. | Repair any leaks and recharge the refrigerant to the correct level. |
| **System pressures Equal** | | |
| 1. Clutch not operating | See magnetic clutch related topics above. | |
| 2.Compressor not pumping. | Equal high and low pressures. | Replace compressor. |



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# HYDRAULIC SCHEMATIC

T40140 (S/N 26321/2001 et suivant (and above))






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