85C
95C
105C
Tractor

SERVICE MANUAL

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English
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CASE IH AGRICULTURE

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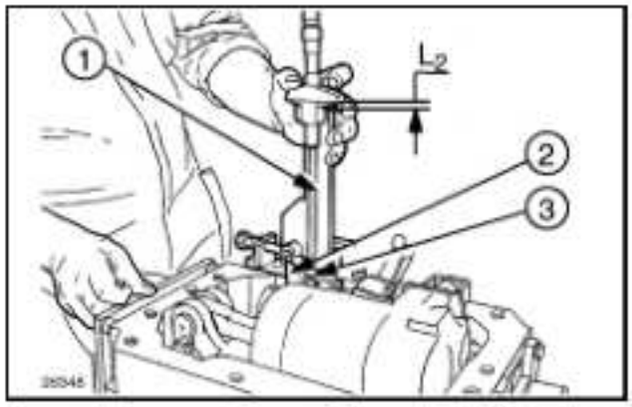
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22. Insert the rod of tool **380000263 (1)** in the seat of the draft control internal lever **(2)**.

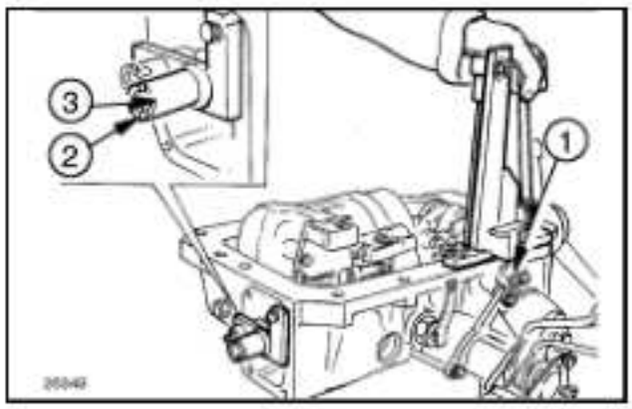
23. With the end of the mobile cap on tool **380000264** on the same plane as the external surface (**(2)**, **15**), adjust the tie-rod **(3)** and, using a depth gauge, read the value **(L2)** between the upper surface of the rod and the contact surface of the gauge on the tool **380000263 (1)**.



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24. The distance (**(L2)**, **16**) must be:
L2 = L3 +L4
where:
L3 = value measured with tool **380000263** fitted on contact surface;
L4 = **22.9 - 23.1 mm** (**0.902 - 0.909 in**). Operating value between lift body surface on transmission casing and rod contact surface on lever (**(3)**, **16**).

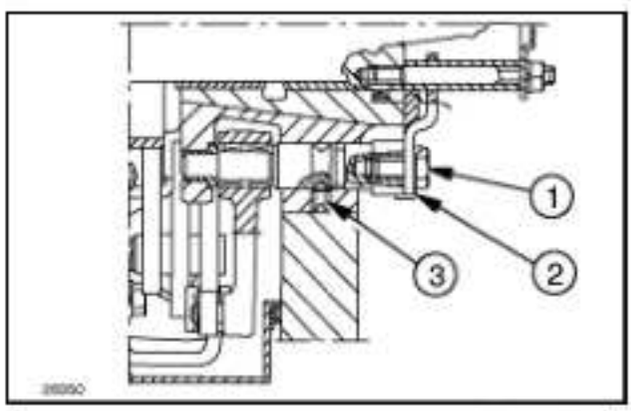
NOTE: *This corresponds to a value (**(L1)**, **4**) of **82 - 82.1 mm** (**3.228 - 3.232 in**) between the end of the lever and the lower plane of the lift body, measured applying a force **(F1)** of **40 - 45 N** (**8.99 - 10.12 lb**) that is equal to a force of **4 - 4.5 kg** (**8.82 - 9.92 lb**) on the end of the lever.*



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ATTENTION: *Always check that when the mobile cap is positioned exactly on the same plane as the external surface **(2)** of tool **380000264** the distance (**(L2)**, **16**) is:*
L2 = L3 +L4
where:
***L3** = distance measured with tool **380000263** installed on reference surface; **L4** = **22.9 - 23.1 mm** (**0.902 - 0.909 in**). Operating value between lift body surface on transmission casing and rod contact surface on lever (**(3)**, **16**). If not, adjust the eccentric pin **(1)** and the knurled screw (**(2)**, **16**) on tool **380000263** until the aforementioned values are obtained.*

25. Fit the threaded grub screw **(3)** and tighten the screw **(1)** without beading the safety washer **(2)**.



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2090-Break in CAN communication between the ADIC and the XCM transmission control unit

Control Module : XCM (multi-function CM)

Cause:
No exchange of fault codes and information between the controllers.

Possible failure modes:

1. Broken wiring.
2. Faulty connectors
3. Faulty controller

Solution:

1. Disconnect the connectors from the various controllers:
   X-200 from the transmission control unit (**XCM**), pin 15 and 16
   X-450 from the dashboard control unit (**ADIC**), pin 3 and 4
   and check the diagnostics connector **X-376**, pin C and D

   A. Ensure that the connectors are connected, not damaged, the pins are in the correct position and that the fit is tight. Repair or replace as necessary.

   B. If the connectors are okay, continue to step **2**
2. Check the continuity of the wiring:

   A. Check continuity on the cable **CAN1-A-L**.
   X-200 from the transmission control unit (**XCM**), pin 16, wire 0.75 (GN) to the dashboard (**ADIC**) **X-450** pin 4, wire 0.75 (GN)
   X-200 from the transmission control unit (**XCM**), pin 16, wire 0.75 (GN) to the diagnostics connector **X-376** pin D, wire 0.75 (GN)
   Check continuity on the cable **CAN1-A-H**.
   f **X-200** from the transmission control unit (**XCM**), pin 15, wire 0.75 (YE) to the dashboard (**ADIC**) **X-450** pin 3, wire 0.75 (YE)
   X-200 from the transmission control unit (**XCM**), pin 15, wire 0.75 (YE) to the diagnostics connector **X-376** pin C, wire 0.75 (YE)If the is no continuity, repair or replace the wiring harness as necessary.

   B. If there is continuity, continue to step **3**
3. Check the terminators of the **CAN** line:

   A. Measure the resistance of the terminators:
   X-200 between pin 16 and pin 15
   X-450 between pin 3 and pin 4, is the resistance **120 Ω**.

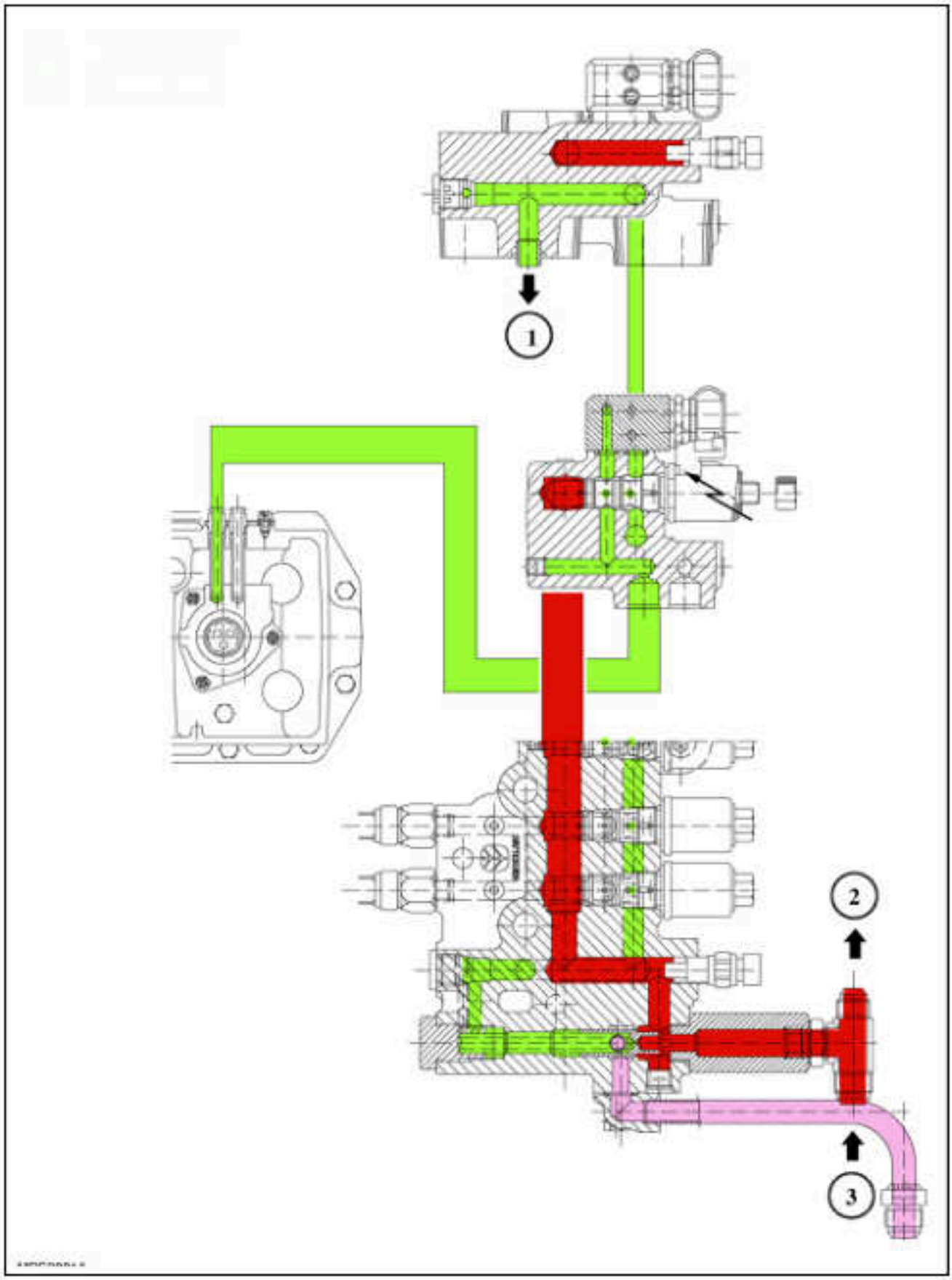
   B. If the terminators are okay, continue to step **4**
4. Check the total resistance of the **CAN** line:

   A. Reconnect all the controllers Measure the resistance on the diagnostic connector:
   X-376, between pins D and pin C, the resistance should be approximately **60 Ω**.

   B. If the total resistance of the terminators is okay, download the correct software release. If the error is repeated, remove and temporarily replace the control unit (**XCM**) and, if the error is repeated again, fit the control unit back on and replace the dashboard control unit (**ADIC**),

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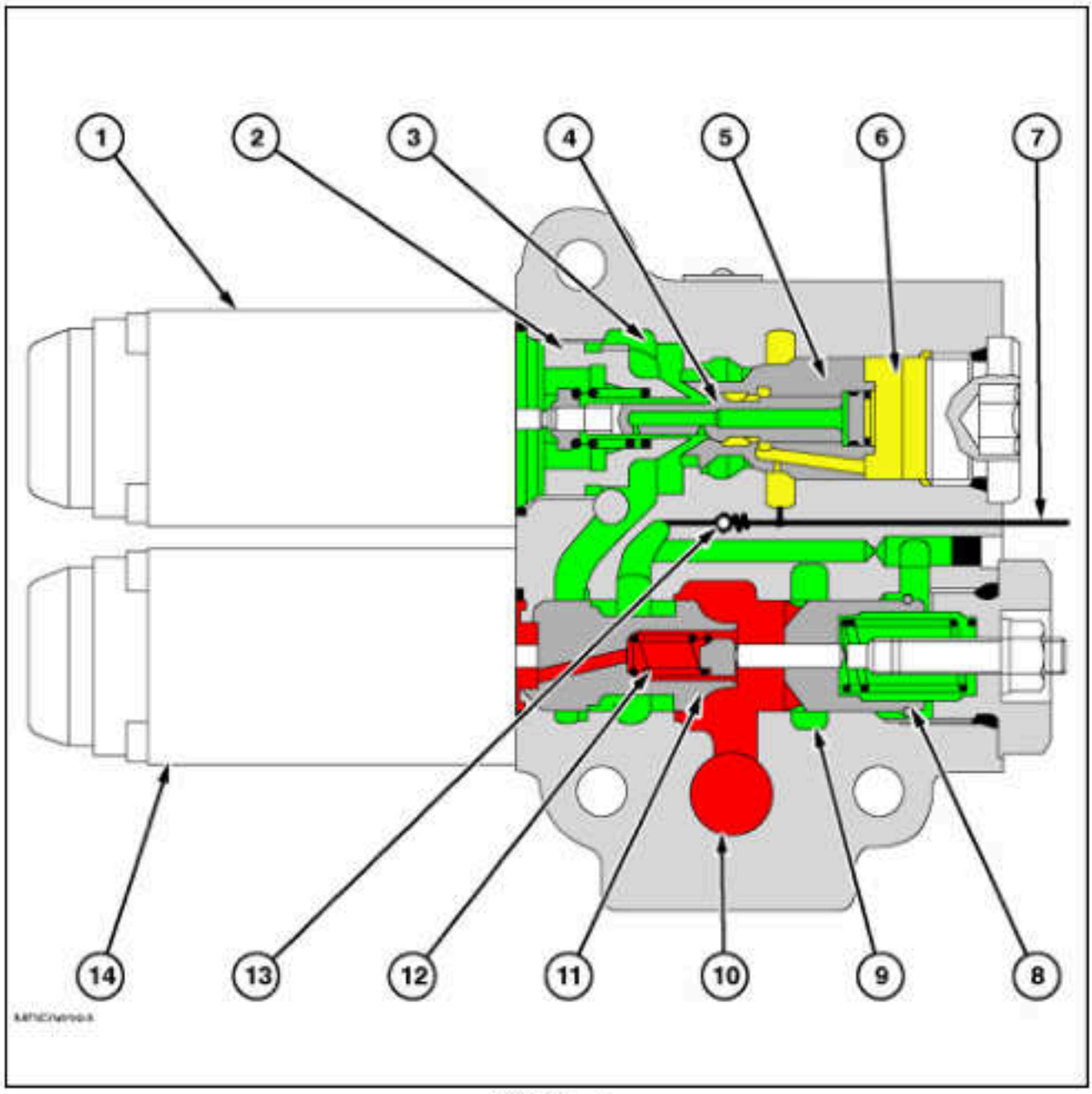
Power shuttle transmission - Hydraulic schema Power Shuttle transmission with Dual Command (2 Speed Power Shift) function (24+24) -- Clutch C in discharge



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Command valve - Dynamic description

Electronically controlled lift functional diagram. Neutral phase



: Oil at static rest.
: Pressurized oil.
: Discharge oil.

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Harnesses and connectors - Electrical schema INPUT/OUTPUT WIRING DIAGRAM FOR THE CENTRAL CONTROL UNIT (CCU)

Farmall 85C, less cab, with mechanical or power shuttle transmission [ZxJX5xxxx] Transmission - Mechanical, Farmall 85C, with cab, with mechanical or power shuttle transmission [ZxJX5xxxx] Transmission - Mechanical, Farmall 85C, less cab, with mechanical or power shuttle transmission [ZxJX5xxxx] Transmission - Mechanical, Farmall 85C, with cab, with mechanical or power shuttle transmission [ZxJX5xxxx] Transmission - Mechanical, Farmall 95C, less cab, with mechanical or power shuttle transmission [ZxJX5xxxx] Transmission - Mechanical, Farmall 95C, with cab, with mechanical or power shuttle transmission [ZxJX5xxxx] Transmission - Mechanical, Farmall 95C, less cab, with mechanical or power shuttle transmission [ZxJX5xxxx] Transmission - Mechanical, Farmall 95C, with cab, with mechanical or power shuttle transmission [ZxJX5xxxx] Transmission - Mechanical, Farmall 105C, less cab, with mechanical or power shuttle transmission [ZxJX5xxxx] Transmission - Mechanical, Farmall 105C, with cab, with mechanical or power shuttle transmission [ZxJX5xxxx] Transmission - Mechanical, Farmall 105C, less cab, with mechanical or power shuttle transmission [ZxJX5xxxx] Transmission - Mechanical, Farmall 105C, with cab, with mechanical or power shuttle transmission [ZxJX5xxxx] Transmission - Mechanical

CONNECTION	DESCRIPTION
EDC + EHR	
X-200-20	+12 VH
X-210-29	EXT UP
X-210-30	EXT DOWN
X-210-20	RAISE SW
X-210-18	WORK SW
X-210-6	R/L_FAULT_SW
X-210-2	ROCK SHAFT SENSOR
X-210-3	POSITION
X-210-8	DRAFT
X-210-5	HEIGHT LIM
X-210-7	MAX SLIP
X-210-4	DROP RATE
X-210-6	SENS/MIX
X-210-10	LEFT PIN
X-210-25	VPINS(+8.5V)
X-210-9	RIGHT PIN
X-210-19	RADAR PRESENT (Hi = PRESENT)
X-210-33	RADAR GROUND SPEED

CONNECTION	DESCRIPTION
X-220-14	EHR ENCODER 1
X-240-20	EHR ENCODER 2
X-210-27	EHR ENC ENTER
X-210-24	EHR FLOAT SW
X-230-3	HYDR MASTER SWITCH
X-220-19	STAT LAMP
X-220-24	SLIP LAMP
X-220-11	RAISE LAMP
X-220-25	LOWER LAMP
X-200-5	RAISE SOLENOID
X-220-4	RAISE SOLENOID
X-200-12	LOWER SOLENOID
X-220-5	LOWER SOLENOID
X-240-29	EHR STOP LAMP
ETC	
X-200-14	+12VP
X-230-14	CRANKING SW
X-230-4	Gear 1-2

CONNECTION	DESCRIPTION
X-230-5	RANGE 1 SW
X-230-26	RANGE 2 SW
X-210-21	SAFETY Pr. SW A
X-210-28	SAFETY Pr. SW B
X-230-1	FUSE SENS
X-210-14	TRANS OIL TEMP
X-210-14	WHEEL SPEED
ETC	
X-200-1	+12 VF
X-200-8	+12 VD
X-240-26	DISABLE_DRIVE
X-230-15	FOR_OR_REV_SW

CONNECTION	DESCRIPTION
X-230-13	NEUTRAL_SW
X-210-12	FORWARD_SW
X-210-13	REVERSE_SW
X-210-17	5VREF
X-230-7	CLUTCH PEDAL POT
X-240-24	REACTIVITY LOW
X-240-33	REACTIVITY HIGH
X-200-4	CLUTCH A SOLENOID
X-240-1	CLUTCH A SOLENOID
X-200-11	CLUTCH B SOLENOID
X-240-2	CLUTCH B SOLENOID
X-200-6	CLUTCH C SOLENOID
X-240-3	CLUTCH C SOLENOID
X-220-18	LOADER READY n°1
X-240-27	LOADER READY n°2
X-240-28	LOADER READY n°2
X-200-19	POWER GROUND (PGND)

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