SERVICE MANUAL

H135-155XL2 (G006)



FORM 1559725 Rev. 03/04

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SERVICE MANUAL CONTENTS

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Legend for Figure 18

A. BEFORE TIGHTENING LOCK NUT, MAKE SURE THE HARE SYMBOL IS DIRECTLY FORWARD AND THE TORTOISE SYMBOL IS REARWARD.

1. ROD END
2. ROD
3. CAPSCREW
4. NUT
5. STRAIGHT LINK
6. LINK
7. PIN (ROD END)
8. PIN (ROD END)
9. CRANK WELDMENT
10. LEVER WELDMENT (RIGHT HAND)
11. RANGE KNOB
12. BRACKET WELDMENT
13. CRANK
14. PIN
15. SHAFT
16. TRANSMISSION
17. ROD END

LINKAGE FOR DIRECTION CONTROL LEVER - LATER MODEL H6.00-7.00XL (H135-155XL, H135-155XL$_2$) (F006, G006) TRUCKS

1. Adjust link (1 and 2, Figure 19) so the distance between the center of the pins is 420 ±2 mm (16.54 ±0.08 in.). Tighten lock nuts (12) and install.

2. Move shift lever to **REVERSE** position.

3. Check dimension K to ensure it is the correct distance of 55 ±3 mm (2.17 ±0.08 in.). Dimension K is to rear edge of middle crank hole.

4. Adjust link (6, 7, and 13, Figure 19) so the distance between the center of the pins is 460 ±2 mm (18.11 ±0.08 in.). Lock rod ends with nut (6). Install link in center hole of crank (5).

5. Check the diameter of dimension M. The diameter of dimension M should be 20 ±3 mm (0.80 ±0.12 in.). Dimension M is to rear edge of crank hole.

6. Shift transmission spool to **REVERSE** position (spool pushed into transmission until spool locating detent engages).

7. Install and adjust link (6, 7, and 13, Figure 19) so the lever is in its **REVERSE** position and clevis pin slides freely through clevis and crank hole.

8. Turn clevis one additional turn onto the rod. Tighten lock nuts and install.

9. Shift into **FORWARD** position and check the spool overtravel. Measure the amount of spool movement while pushing the lever onto the **FORWARD** stop and then letting go of the lever, allowing spool detent to engage. If overtravel is 1.0 ±0.5 mm (0.04 ±0.02 in.), go to Step 1. If overtravel is greater than 1.5 mm (0.06 in.), go to step Step 10. If overtravel is less than 0.5 mm (0.02 in.), go to Step 11.

10. If overtravel is greater than 1.5 mm (0.06 in.), move the clevis to the hole closest to the shaft and lengthen link (6,7, and 13, Figure 19) by 4 mm (0.16 in.), 4-1/2 turns.

11. If overtravel is less than 0.5 mm (0.02 in.), use the hole farthest from the shaft and lengthen link (6,7, and 13, Figure 19) by 4 mm (0.16 in.), 4-1/2 turns. Adjust per instructions in Step 6, Step 7, and Step 8.

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Legend for Figure 16

1. HYDRAULIC TANK
2. STEERING HYDRAULIC PUMP
3. HYDRAULIC PUMP
4. MAIN CONTROL VALVE
5. MANIFOLD BLOCK
6. STEERING CONTROL UNIT
7. STEERING CYLINDER
8. BRAKE VALVE
9. OIL CLUTCH HOUSING
10. TILT CYLINDER
11. LIFT CYLINDER
12. LIFT SYSTEM CHECK PORT
13. CHECK PORT

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LPG Symptom Diagnosis

This section will help the technician to diagnose fuel symptom problems on your lift truck. The symptoms to be checked are listed below in Table 5 through Table 15.

Table 5. Preliminary Checks

Checks	Action
Before Using This Section	Before using this section, you should have performed an OBD check and determined that: **1.** The ECM and MIL are operating correctly. **2.** There are no DTCs stored, or a DTC exists but without a MIL. Several of the following symptom procedures call for a careful visual and physical check. The visual and physical checks are very important. The checks can lead to correcting a problem without further checks that may save valuable time.
LPG Fuel System Check	**1.** Verify the complaint. **2.** Locate the correct symptom table. **3.** Check the items indicated under that symptom. **4.** Operate the vehicle under the conditions the symptom occurs. Verify HEGO switching between lean and rich. **NOTE:** Normal HEGO switching indicates the LPG fuel system is in closed loop and operating correctly at that time. **5.** If a laptop computer is available, take a snapshot under the condition that the symptom occurs. Verify normal sensor values and parameters.
Visual and Physical Checks	• Check all ECM system fuses and circuit breakers. • Check the ECM ground for being clean, tight, and in its proper location. • Check the vacuum hoses for splits, kinks, and proper connections. • Check thoroughly for any type of leak or restriction. • Check for air leaks at all the mounting areas of the intake manifold sealing surfaces. • Check for proper installation of the mixer module assembly. • Check for air leaks at the mixer assembly. • Check the ignition wires for the following conditions: – Cracking – Hardness – Proper routing – Carbon tracking • Check the wiring for the following items: – Proper connections, pinches, or cuts. • The following symptom tables contain groups of possible causes for each symptom. The order of these procedures is not important. If the laptop computer readings do not indicate the problems, then proceed in a logical order, easiest to check or most likely to cause first.

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