Conversion Solutions for Industrial Vehicles

I - 46048 Roverbella (MN) - via Paesa, 28 Tel. +39 0376 696809 - Fax +39 0376 1760180 P.I. 03117430235 - C.F. 02209770797

e-mail: <u>info@stsystemtruck.com</u> web: <u>www.stsystemtruck.com</u>



IVECO ML260 Euro3 - Euro5 6x2

Driver's Use and Maintenance Manual For 3rd self-steering tag axle

Version 0

S.T. SYSTEM TRUCK S.p.A.



Trasformazioni e Soluzioni per Veicoli Industriali

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1. GENERAL INFORMATION

1.1. Introduction

This use and maintenance manual is to be considered as an appendix or a complement to the IVECO Driver's Manual supplied with the vehicle and describes only the characteristics and use of the self-steering rear axle.

1.2. Safety Information

- S.T. System Truck cannot give all the safety information and evaluate every single dangerous situation for the person who performs the work, so it is essential that those who carry out the maintenance or repair, use their specialized knowledge in order to guarantee their own and others safety and prevent damage to the vehicle. Therefore, all the operations described are to be carried out in compliance with the directives and instructions of the competent authorities on health and safety at work and environmental protection.
 - Before starting maintenance work, secure the vehicle.
 - Use only instruments that are not damaged and adequate for the operation being performed.

1.3. Warranty

- 1. Warranty period is two (2) years from the date of matriculation.
- Warranty covers damages due to defects in materials, components and parts installed or otherwise attributable to S.T. System Truck. Warranty does NOT cover damage related to consumables such as fuses, light bulbs, brake pads, etc.
- 3. As regards the operational management of the guarantee, reference is made to the IVECO CNH internal procedures.
- 4 S.T. System Truck is not responsible and consequently does not recognize any warranty or assume any responsibility for any defects and / or damages arising from:
 - improper use:
 - non-compliance with the maintenance instructions;
 - any actual overload on the axle (maximum permissible load: 8 tons).



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2. DESCRIPTION AND WORKING PRINCIPLES OF 3RD AXLE

The axle is self-steering in the forward direction, i.e. with the ability to follow the trajectory set by the steering on the front axle with a suitable steering angle.

In the reverse direction, on the contrary, is equipped with a locking device that keeps the wheels aligned straight, otherwise the steering opposite to the travel direction phenomenon could easily occur, damaging the tires and the axle itself. This locking device is activated under the following conditions:

- Automatically when reverse gear is engaged under the condition that the wheels are aligned;
- When the speed of 30 km / h is reached;
- Voluntarily, by pressing the switch on the dashboard (see pictures 2.1).

Therefore, when driving forward, the vehicle is driven like any other vehicle, while in reverse it is necessary to pay attention to the correct insertion of the locking device.



WARNING |

BEFORE DRIVING REVERSE, ALIGN THE WHEELS OF THE 3RD AXLE MOVING THE VEHICLE RUNNING STRAIGHTWAY, TO ALLOW THE CORRECT INSERTION OF THE REAR AXLE LOCKING DEVICE.





THE YELLOW LED NEXT TO THE BUTTON TURNS ON AT THE INSERTION OF THE REVERSE GEAR OR THROUGH THE VOLUNTARY CONTROL ON THE DASHBOARD (PICTURE 2.1)



NOTE

THE AXLE LOCKING DEVICE IS AUTOMATICALLY ACTIVATED WHEN:

- INSERTING THE REVERSE GEAR;
- - EXCEEDING THE SPEED OF 30 KM / H;
- - ACTIVATING THE SWITCH ON THE DASHBOARD

The suspension of the 3rd axle is pneumatic, whose pneumatic system is in derivation from the one existing on the vehicle, being different only by the addition of some components.

The only warning that could derive from the pneumatic section of the 3rd axle is referred to low pressure in the system, which activates the red LED (refer to picture 2.1)

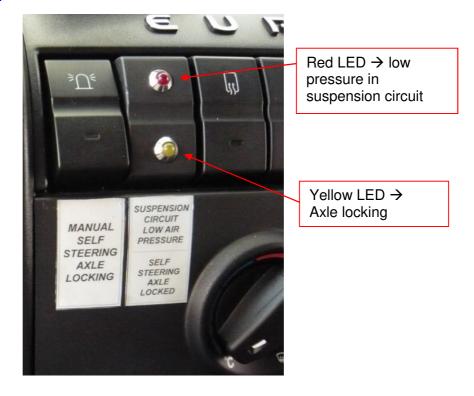


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Picture 2.1

The pneumatic system controls also the 3rd axle brake system. This system, brakes the wheels simultaneously and under the same command as the other axles.

As a consequence, both the ABS function and the brake wear warning signal are integrated into the existing system, so that, in case of worn-out pads, the warning light on the instrument panel lights up.

3. MAINTENANCE OPERATIONS OF THE 3RD AXLE

The added axle does not require particular attention, except for some simple maintenance operations on a regular basis in order to ensure its working operation throughout the useful life of the vehicle.

As far as the axle is concerned, the components that require regular maintenance are the joints and the rotating parts of the axle. Figure 3.1 shows the greasing points where the lubricating grease has to be applied.

Concerning the suspension, there are no maintenance operations to be carried out.

Table 3.1 shows maintenance operations with relative mileage intervals.

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TAB. 3.1 – MAINTENANCE INTERVALS

	AFTER FIRST 5.000 KM OR AFTER 1 ST MONTH	EVERY 30.000 KM OR EVERY 3 MONTHS	EVERY 90.000 KM OR EVERY 6 MONTHS	EVERY 150.000 KM OR EVERY 12 MONTHS
GREASE				
KINGPIN JOINT		X		
HUB BEARING LUBRICATION	REFER TO IVECO MANUAL			
MECHANICAL CHECKS				
WHEELNUT TIGHTENING TORQUE				
WARNING: EVEN AFTER FIRST 50 KM AND 150 KM. THEN AFTER EVERY WHEELS REMOVAL	х		X	
HUN BEARING CLEARANCE	REFER TO IVECO MANUAL			
VISUAL CHECKS				
DETERIORATION OR BREAKING OF THE PARTS SUBJECTED TO WEAR	X	X		
TYRES WEAR	X	X		

- For vehicles used in heavy duty conditions, intervals must be reduced.
- After long stopping periods, before starting up, perform a general check for the various components to be working properly.

