SMCS - 1611,3065 Telehandler TH3510D (S/N: TH21-UP; TH31-UP) TH357D (S/N: TD61-UP; TD71-UP) TH408D (S/N: TH41-UP; TH91-UP)

TH514D (S/N: MWG1-UP)

## Introduction

This Special Instruction provides the procedure and required parts list for the installation of an optional steering column-mounted speed switch assembly for certain Telehandlers.

Do not perform any procedure in this Special Instruction until you have read the information and you understand the information.

# **Reference Section**

**Reference:** Operation and Maintenance Manual , SEBU9961 , "SEBU9961 Models TH306D, TH357D, TH408D & TH3510D - English Operation & Maintenance Manual"

**Note:** This OMM is for Europe, Africa, Middle East, Latin America, and Australia regions.

**Reference:** Operation and Maintenance Manual , SEBU9962 , "SEBU9962 Models TH306D, TH357D, TH408D, TH3510D - Operation & Maintenance Manual (ANSI)"

Note: This OMM is for USA and Canada regions

**Reference:** General Service Information , UENR6280 , "UENR6280 Models TH306D, TH357D, TH408D, TH3510D - Service Manual"

### Safety Section

#### 🏠 WARNING

Do not operate or work on this product unless you have read and understood the instruction and warnings in the relevant Operation and Maintenance Manuals and relevant service literature. Failure to follow the instructions or heed the warnings could result in injury or death. Proper care is your responsibility.

# 🛕 WARNING

Failure to follow all safety guidelines prescribed in this document and by governing authorities and regulatory agencies may result in severe injury or death of personnel or machine damage.

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Before servicing/performing maintenance on the machine, electrical power must be physically disconnected; battery plugs must be disconnected from the batteries, or the trailing cable must be unplugged, and warning tags and padlocks shall be applied by a certified electrician. Certified electricians shall perform or direct any electrical work, including any energized testing, repair work in controllers, motors, or other approved compartments, and shall insure that all compartments are properly closed and inspected prior to re-energization. All applicable lock out and tag out procedures must be followed.

#### https: Required ePailarts

Required Parts				
ltem	Qty	Part Number	Part Name	
1	2	105-3480	Bolt	
2	1	477-3267	Speed Switch Assembly	
3	1	569-1915	Film	

Table 1

# **Required Tools**

Required Tooling					
Tool	Qty	Part Number	Part Name		
T1	1		T25 Torx bit with 30 inch extension		
Т2	1	517-9882	Software <sup>(1)</sup>		
	1	330-5251	Controller Kit		

Table 2

<sup>(1)</sup> with 421-5320 Cable Kit

# **Installation Procedure**



Illustration 1 (A) End of the front console g06444407

1. Remove the end of the front console (A). Refer to Illustration 1.



Illustration 2 (B) Brake pedal (C) Bolts (D) Lock nuts g06444415

2. Remove the brake pedal (B) by removing bolts (C) and lock nuts (D). Refer to Illustration 2.

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Illustration 3 (E) Screw (F) Storage box

3. Remove the screw (E) in the bottom of the storage box (F). Remove the storage box. Refer to Illustration 3.

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Illustration 4 g06444430 (G) Air conditioning recirculation cover and filter

4. Remove the air conditioning recirculation cover and filter (G). Refer to Illustration 4.



Illustration 5

g06444451

(H) Machine screws on the left-hand top corner of the lower dash cover
(J) Machine screw in the front top right-hand corner of the lower dash cover
(K) Machine screws in the center of the lower dash cover by the recirculation filter housing
(L) Machine screws on the bottom of the lower dash cover behind the pedals

5. Loosen the two machine screws on the left-hand top corner of the lower dash cover (H).

Remove the machine screws in the center of the lower dash cover by the recirculation filter housing (K). Remove the two machine screws on the bottom of the lower dash cover behind the pedals (L). Refer to Illustration 5.

Note: Screw (J) will be removed in Step 7.

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Illustration 6 (M) Lower air vents g06444474

- 6. Pry out the lower air vents (M). Loosen the hose clamps and remove the vents. Refer to Illustration 6.
- 7. Carefully pull the lower dash towards the operator seat. Machine screw (J) in Illustration 5 is on the back upper right corner of the lower dash cover. A 30 inch extension with a T25 Torx bit (T1) is required to reach the screw from behind the lower left side of the lower cover . Remove the screw.



Illustration 7 (N) Handheld analyzer port g06444483

- 8. Unclip the handheld analyzer port (N) and push the port out the back of the lower dash cover. Refer to Illustration 7.
- 9. Remove the lower dash cover.



Illustration 8 (P) Gauge cluster gp g06444491

10. To remove the gauge cluster gp (P), reach behind the upper dash. On the left side of the gauge cluster gp is a metal clip. Push the clip toward the middle of the gauge cluster group and lift out the gauge cluster group. Do not disconnect the electrical harness. Lay it on top of the upper dash. Refer to Illustration 8.

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Illustration 9 (R) Screw (S) Left cover

(T) Screws

g06444497

11. On the left side of the steering column at the wiper switch, remove the screw (R) and left cover (S). Both can be discarded. Refer to Illustration 9.



- 12. At the wiper switch, remove the two screws (T) that hold the half clamp to the wiper switch. Save these screws. Refer to Illustration 10.
- 13. Tilt the steering wheel all the way down.
- 14. Feed the wire harness for the new Speed Switch Assembly beside the wiper switch harness along the top of the steering column inside the flexible boot.
- 15. Connect the wire harness for the new Speed Switch Assembly to connector SW13 behind the gauge cluster gp.
- 16. Remove the machine screw from the plastic cover of the new Speed Switch Assembly. Slide the cover out of the way.



Illustration 11 g06444515 (2) 477-3267 Speed Switch Assembly

17. Attach the new Speed Switch Assembly (2) to the wiper switch with the 2 screws (T) retained from Step 12.

**Note:** There is a tab on the bottom inside of the shift lever that has to go in the hole on the https://sis2.cat.com/#/detail? https://sis2.cat.com/#/detail? keyword=M0108597&tab=3&serialNumber=TH9&infoType=15&serviceMediaNumber=M0108597&serviceIeSystemControlNumber=i07816412

- 18. Slide the new Speed Switch Assembly cover back in place and install the machine screw.
- 19. Apply the new 569-1915 Film (3) to the Speed Switch Assembly.
- 20. Reassemble all covers and vents.

# Enabling the New Speed Switch in the Machine Software

- 1. Connect the **517-9882** Software using the **421-5320** Cable Kit, or the **330-5251** Controller Kit (Handheld Analyzer) (T2).
- 2. Under "Machine Configuration" enable the option "Column Shift".
- 3. Turn the machine ignition switch to the OFF position for 2 minutes.
- 4. Start the machine and test the transmission functions as per the Operation and Maintenance Manual.

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