Revisions			Bill of N	Materials
Rev. Date Author Description		Id Type	Manufacturer	
A 5/2/2025 C. BENTLEY Initial release		1 Device	- Iviariaractarer	AUTO CHOKE PC
		2 Harness		WH01
		3 Harness		WH02
		4 Device		MOTOR
		5 Device 6 Device		LIMIT SWITCH THERMOCOUPLE
		0 Device		THERWOCOUPLE
Notes				
	C3			
	Harness [2]			
	C2			
C1				
	C2			
C1				
PCB [1]				
		MOTOR [4]	
	Harness2 [3]	LIMIT_SW	/ITCH_1 [5]	
	LW2			
		_		
THERMOCOUPLE [6]				
THERMINOCOURSE [6]	LW3	LIMIT_S	WITCH_2 [5]	
	LW4			
	LW5			
	LIT J			
				Date
		Drawn By	C. BENTLEY 5/	/2/2025

Auto choke top level wiring

Description Automatic choke controller and digital dash for ME 507

	Bill of Materials							
Id	Id Type Manufacturer Part Number							
1	Device		AUTO CHOKE PCB	1				
2	Harness		WH01	1				
3	Harness		WH02	1				
4	Device		MOTOR	1				
5	Device		LIMIT SWITCH	2				
6	Device		THERMOCOUPLE	1				

Eng Approved ----Mfg Approved QA

Part Number Auto Choke

Revision

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Title:	
Part Number:	Auto Choke
Description:	Automatic choke controller and digital dash for ME 507



Rev.	Date	Author	Description
Α	5/2/2025	C. BENTLEY	Initial release

Revisions 1 of 1 Page 2 of 7

Title:	
Part Number:	Auto Choke
Description:	Automatic choke controller and digital dash for ME 507



Flag Quant	ity Note					

Notes 1 of 1 Page 3 of 7

Title:	
Part Number:	Auto Choke
Description:	Automatic choke controller and digital dash for ME 507



Id	Туре	Manufacturer	Part Number	Description	Quantity	Usage
1	Device		AUTO CHOKE PCB		1	PCB
2	Harness		WH01	Connects PCB to existing bike connections	1	Harness1
3	Harness		WH02	Connects PCB to new devices on bike	1	Harness2
4	Device		MOTOR		1	MOTOR
5	Device		LIMIT SWITCH		2	LIMIT_SWITCH_1, LIMIT_SWITCH_2
6	Device		THERMOCOUPLE		1	THERMOCOUPLE

Bill of Materials 1 of 1 Page 4 of 7

Title:	
Part Number:	Auto Choke
Description:	Automatic choke controller and digital dash for ME 507



#		Туре	Manufacturer	Part Number	Description	Quantity
	2	Connector	MOLEX	03091157	2.36mm Diameter Standard .093" Pin and Socket	2
					Receptacle Housing, 15 Circuits, 3 Rows, without	
					Mounting Ears, with Lock Ramps	
	6	Connector	MOLEX	0510210600	CONN RCPT HSG 6POS 1.25MM	1
	3	Connector	Ruibapa	P-029-06	2.8mm automotive wire connector	1
	4	Connector	Ruibapa	P-029-08	2.8mm automotive wire connector	1
	1	Device		AUTO CHOKE PCB		1
	8	Device		LIMIT SWITCH		2
	7	Device		MOTOR		1
	9	Device		THERMOCOUPLE		1
	5	Wire				0 in

Aggregate Bom 1 of 1 Page 5 of 7

Title:	
Part Number:	Auto Choke
Description:	Automatic choke controller and digital dash for ME 507



#	Subsystem	Device / Harness	Endpoint	Signal
1		o-o Harness1	() C1.1	
1		o-o Harness1	C2.1	
2		o-o Harness1	C1.2	
2		o⊸o Harness1	C2.2	
		D→0 Harness1	C1.3	
3		o⊸o Harness1	C2.3	
,		o⊸o Harness1	C1.4	
4		o→o Harness1	C2.4	
-		o→o Harness1	C1.5	
5		o→o Harness1	C2.5	
		D→0 Harness1	C1.6	
6		o→o Harness1	C2.6	
7		D→0 Harness1	C1.7	
7		o-o Harness1	C3.1	
0		o-o Harness1	C1.8	
8		o-o Harness1	C3.2	
0		0-0 Harness1	C1.9	
9		o-o Harness1	C3.3	
10		o-o Harness1	C1.10	
10		o-o Harness1	C3.4	
11		o-o Harness1	C1.11	
11		p−o Harness1	(C3.5	
12		0−0 Harness1	C1.12	
12		0−0 Harness1	C3.6	
13	5	0−0 Harness1	C1.13	
13		p−o Harness1	(C3.7	
14		► Harness2	C1.1	
14		▶ Harness2	① C2.1	
15		► Harness2	C1.2	
13		№ Harness2	① C2.2	
16		▶ Harness2	Q C1.3	
10		□ Harness2	() C2.3	
17		▶ Harness2	C1.4	
17		► Harness2	C2.4	
18		▶ Harness2	(i) C1.5	
10		□ Harness2	C2.5	
19		▶ Harness2	C1.6	
19		▶ Harness2	Q C2.6	
20		▶ Harness2	C1.7	
		D→0 Harness2	⊐ LW1	
21		o⊸o Harness2	C1.8	

Nets 1 of 2 Page 6 of 7

Title:	
Part Number:	Auto Choke
Description:	Automatic choke controller and digital dash for ME 507



#	Subsystem	Device / Harness	Endpoint	Signal
		0−0 Harness2	⊐ LW2	
22		0−0 Harness2	C1.9	
22		0−0 Harness2	⊐ LW3	
22		0−0 Harness2	C1.10	
23		0−0 Harness2	⊐ LW4	
2.4		0−0 Harness2	C1.11	
24	•	0−0 Harness2	⊐ LW5	

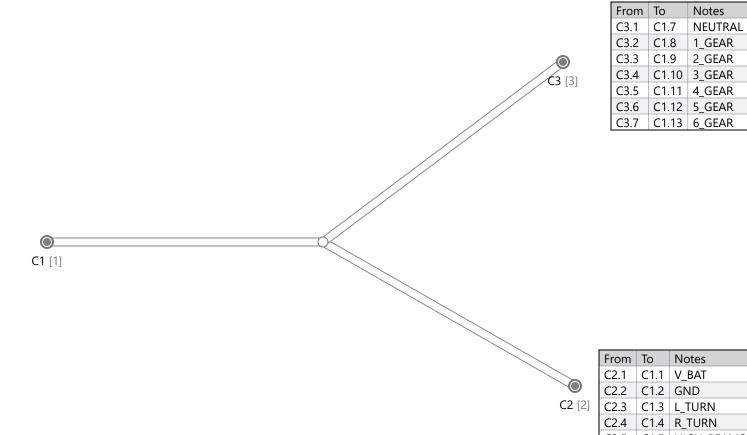
Nets 2 of 2 Page 7 of 7

Revisions			
Rev.	Date	Author	Description
А	5/2/2025	C. BENTLEY	Initial release

	Bill of Materials						
Id	Туре	Manufacturer	Part Number	Quantity			
1	Connector	MOLEX	03091157	1			
2	Connector	Ruibapa	P-029-06	1			
3	Connector	Ruibapa	P-029-08	1			
4	Wire	-		0 in			

Notes		

From	То	Notes
C1.1	C2.1	V_BAT
C1.2	C2.2	GND
C1.3	C2.3	L_TURN
C1.4	C2.4	R_TURN
C1.5	C2.5	HIGH_BEAMS
C1.6	C2.6	LOW_BEAMS
C1.7	C3.1	NEUTRAL
C1.8	C3.2	1_GEAR
C1.9	C3.3	2_GEAR
C1.10	C3.4	3_GEAR
C1.11	C3.5	4_GEAR
C1.12	C3.6	5_GEAR
C1.13	C3.7	6_GEAR



From	То	Notes	
From C2.1	To C1.1	Notes V_BAT	
	-		

C2.5 C1.5 HIGH_BEAMS C2.6 C1.6 LOW_BEAMS

Name

C. BENTLEY

				Drawn By
Title Frieting Harness		Part Number WH01		Eng Approved
Description .	3			
Connects PCB to	Revision Connects PCB to existing bike connections			



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Title:	
Part Number:	WH01
Description:	Connects PCB to existing bike connections



Rev.	Date	Author	Description
Α	5/2/2025	C. BENTLEY	Initial release

Revisions 1 of 1 Page 2 of 7

	Title:	
	Part Number:	WH01
Ī	Description:	Connects PCB to existing bike connections



Flag Quantity	Note	

Notes 1 of 1 Page 3 of 7

Title:	
Part Number:	WH01
Description:	Connects PCB to existing bike connections



Id	Туре	Manufacturer	Part Number	Description	Quantity	Usage
1	Connector	MOLEX	03091157	2.36mm Diameter Standard .093" Pin and Socket	1	C1
				Receptacle Housing, 15 Circuits, 3 Rows, without		
				Mounting Ears, with Lock Ramps		
2	Connector	Ruibapa	P-029-06	2.8mm automotive wire connector	1	C2
3	Connector	Ruibapa	P-029-08	2.8mm automotive wire connector	1	C3
4	Wire				0 in	W1

Bill of Materials 1 of 1 Page 4 of 7

Title:	
Part Number:	WH01
Description:	Connects PCB to existing bike connections



From	То	Conductor	Conductor PN	Twisted With	Size	Length	From Contact PN	Notes
C1.1	C2.1							V_BAT
C1.2	C2.2							GND
C1.3	C2.3							L_TURN
C1.4	C2.4							R_TURN
C1.5	C2.5							HIGH_BEAMS
C1.6	C2.6							LOW_BEAMS
C1.7	C3.1							NEUTRAL
C1.8	C3.2							1_GEAR
C1.9	C3.3							2_GEAR
C1.10	C3.4							3_GEAR
C1.11	C3.5							4_GEAR
C1.12	C3.6							5_GEAR
C1.13	C3.7							6_GEAR

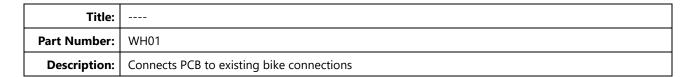
Wiring Table 1 of 1 Page 5 of 7

Title:	
Part Number:	WH01
Description:	Connects PCB to existing bike connections



#	Туре	Reference Designator	Manufacturer	Part Number	Color	Size	From Strip	To Strip	Length	Twisted With	Notes
1		C1.1 - C2.1									V_BAT
2		C1.2 - C2.2									GND
3		C1.3 - C2.3									L_TURN
4		C1.4 - C2.4									R_TURN
5		C1.5 - C2.5									HIGH_BEAMS
6		C1.6 - C2.6									LOW_BEAMS
7		C1.7 - C3.1									NEUTRAL
8		C1.8 - C3.2									1_GEAR
9		C1.9 - C3.3									2_GEAR
10		C1.10 - C3.4									3_GEAR
11		C1.11 - C3.5									4_GEAR
12		C1.12 - C3.6									5_GEAR
13		C1.13 - C3.7									6_GEAR

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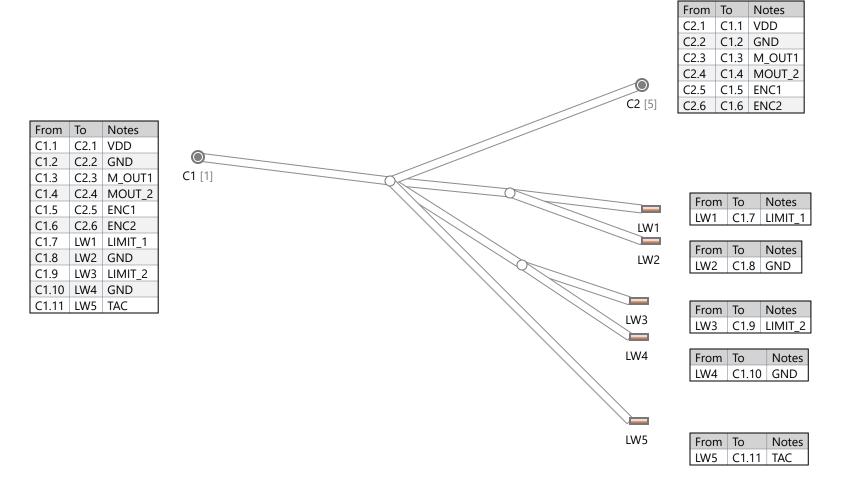
#	Manufacturer	Part Number	Description	Label Text

Labels 1 of 1 Page 7 of 7

	Revisions					
Rev.	Date	Author	Description			
Α	5/2/2025	C. BENTLEY	Initial release			

	Bill of Materials					
Id	Туре	Manufacturer	Part Number	Quantity		
1	Connector	MOLEX	03091157	1		
4	Wire			0 in		
5	Connector	MOLEX	0510210600	1		

Notes			



New Harness

Description Connects PCB to new devices on bike

Part Number WH02

		Name	Date	
	Drawn By	C. BENTLEY	5/2/2025	r
	Eng Approved			
In ··	Mfg Approved			This
Revision	0.4			that



without written authorization.

	Title:	
	Part Number:	WH02
Description: Connects PCB to new devices on bike		Connects PCB to new devices on bike



Rev.	Date	Author	Description
Α	5/2/2025	C. BENTLEY	Initial release

Revisions 1 of 1 Page 2 of 7

	Title:				
	Part Number:	WH02			
Description: Connects PCB to new devices on bike					



Flag Quant	tity Not	ote					

Notes 1 of 1 Page 3 of 7

Title:	
Part Number:	WH02
Description:	Connects PCB to new devices on bike



Id	Туре	Manufacturer	Part Number	Description	Quantity	Usage
1	Connector	MOLEX	03091157	2.36mm Diameter Standard .093" Pin and Socket	1	C1
	Receptacle Housing, 15 Circuits, 3 Rows, without					
				Mounting Ears, with Lock Ramps		
4	Wire				0 in	W1
5	Connector	MOLEX	0510210600	CONN RCPT HSG 6POS 1.25MM	1	C2

Bill of Materials 1 of 1 Page 4 of 7

Title:	
Part Number:	WH02
Description:	Connects PCB to new devices on bike



From	То	Conductor	Conductor PN	Twisted With	Size	Length	From Contact PN	Notes
C1.1	C2.1							VDD
C1.2	C2.2							GND
C1.3	C2.3							M_OUT1
C1.4	C2.4							MOUT_2
C1.5	C2.5							ENC1
C1.6	C2.6							ENC2
C1.7	LW1							LIMIT_1
C1.8	LW2							GND
C1.9	LW3							LIMIT_2
C1.10	LW4							GND
C1.11	LW5							TAC

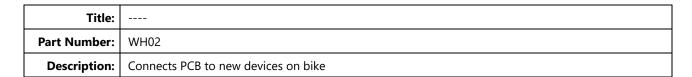
Wiring Table 1 of 1 Page 5 of 7

Title:	
Part Number:	WH02
Description:	Connects PCB to new devices on bike



#	Туре	Reference Designator	Manufacturer	Part Number	Color	Size	From Strip	To Strip	Length	Twisted With	Notes
1		C1.1 - C2.1									VDD
2		C1.2 - C2.2									GND
3		C1.3 - C2.3									M_OUT1
4		C1.4 - C2.4									MOUT_2
5		C1.5 - C2.5									ENC1
6		C1.6 - C2.6									ENC2
7		C1.7 - LW1									LIMIT_1
8		C1.8 - LW2									GND
9		C1.9 - LW3									LIMIT_2
10		C1.10 - LW4									GND
11		C1.11 - LW5									TAC

Cutlist 1 of 1 Page 6 of 7





#	Manufacturer	Part Number	Description	Label Text

Labels 1 of 1 Page 7 of 7