



SERVICE BULLETIN

Subject: New Kibes RT Updated Software and Implementing Freewheeling Diodes for Mux-5B Bulletin

Bulletin Type: Field Fix Mandatory

Bulletin No: TS45-FM-2401

PQR No: 500000007500

Rev No: 00

Ref. No: 700004479

Vehicle Model: TS45

Flat Rate Time / Code:120 min

Date of issue: 01.03.2024

Modify Before: 01.03.2025

What to do with off coming parts:

- Scrap
- Return
- Use with additional parts
- On consignment
- No off coming parts

What to do with outstanding parts of previous revision:

- Scrap
- Return
- Use with additional parts
- On consignment
- No outstanding parts

Description of the modification:

This bulletin includes the updated RT Kibes ZR5-A software. It will improve Multiplexing units' performance. Also, additional improvements were added to new Multiviu software. Freewheeling diodes will be implemented to the "Mux 1.1" and "Mux 2.1".

Bulletin Responsible:

Bahadır Kaya (Software R&D)
Utku Devecioğlu (Hardware R&D)

Published & Approved By: Alper Tekniker

SAFETY INSTRUCTIONS

1. Mechanical Requested Dress Code

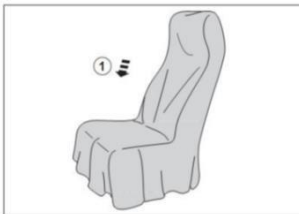


WARNING:

- Dress properly to avoid personal injury and damage to the vehicle

- ✓ Always wear protective clothing
- ✓ Do not wear any worn or loose-fitting clothing
- ✓ Remove jewelry before starting to work
- ✓ In case of long hair, use hairnet
- ✓ The illustration on the left shows some of the correct and incorrect clothing
- ✓ Sharp edged items should be avoided in order not to scratch vehicle (i.e. belts, watches, necklace)

2. Protect Seats when Mechanic Starts Working



- ✓ Seats, trimming, upholstery stuff and carpeting should be protected with appropriate coverings.

3. Welding on the Chassis

- Always disconnect the batteries (starting with the negative lead).
- Disconnect the connectors of electrical and electronic equipment (electronic control units, sensors and actuators) if they are less than 2 meters away from the chassis part to be welded or the earth terminal of the welding equipment.
- The earth terminal should never be attached to vehicle components such as engine, axles and springs. Arcing on these parts is not permitted, because of the risk of damage to bearings, springs, etc.
- The earth terminal must make good contact and be placed as close as possible to the part to be welded.
- Plastic pipes, rubber parts and parabolic springs should be well protected against welding spatter and temperatures higher than 70°.
- The contact switch must not be in the accessory or contact position. The contact key should be removed.
- Reconnect in reversed order of disconnecting. Ensure that a good earth connection is made between chassis, engine and cab.

INCLUDED PARTS LIST

	Part No	Part Name	Picture	Qty	Unit of Measure
	9431-14Y	DIYOT(10A05.DC(10A)		3	Qty

The program Link

Kibes :

** TS02-LC3-005 software should be installed on vehicles with software starting with TS02-LC3-...

<https://content.temsa.com/sapcs?get&pVersion=0045&contRep=ZADNSPEKTEP07101&docId=0050568F725E1EEE5DDB7DAC19524B8&accessMode=r&compId=TS02-LC3-005.zip>

Multiviu :

**TS02-MV-002 software should be installed on vehicles with software starting with TS02-MV-...

<https://content.temsa.com/sapcs?get&pVersion=0045&contRep=ZADNSPEKTEP07101&docId=0050568F725E1EEEABF57C06E0CF24B8&accessMode=r&compId=TS02 MV 002.L2P.zip>

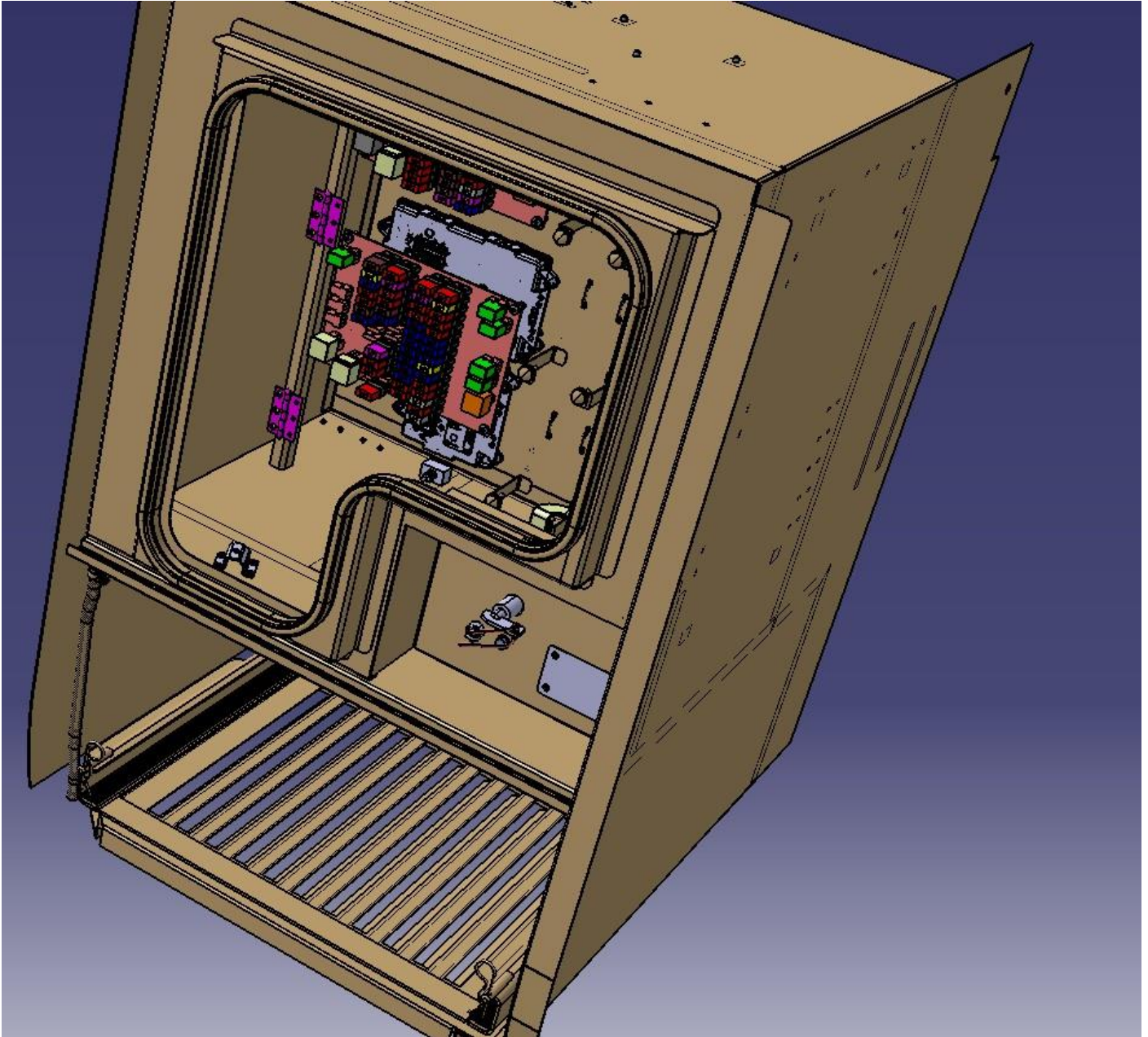
Important Note:

-The software mentioned above are up to date software. If there is previously published bulletin for these vehicles, please refer to this bulletin and install these software.

- Please note option selections before installing Kibes software. If the options are reset, after installing, reselect the same options.

Diode Implementation

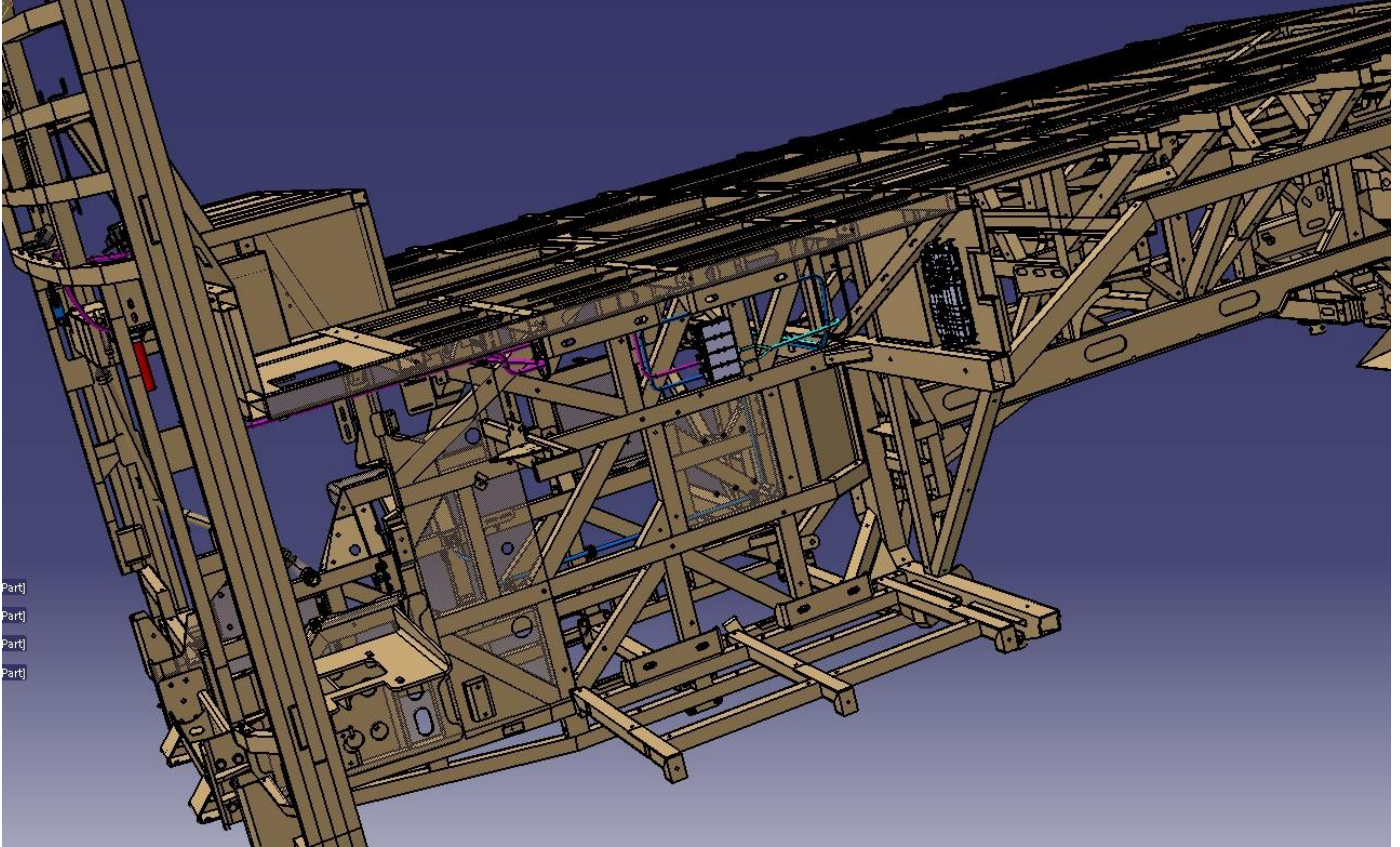
- 1-Open the relay panel lid.
- 2-Locate the MUX5-B 1.1 Which is numbered as 06A033.



- 3-Locate the connector numbered P06A033-B
- 4- To its 15th and 16th pins do the operation explained below.
 - 1-Strip the cable from its 5 cm away from the connector side.
 - 2- Connect the diode's cathode pin to striped part of the cable.
 - 3- Connect the diode's anode pin to nearest ground cable.

5- Open the lid of lift compartment.

6- Locate the MUX5-B 2.1 Which is numbered as 06A037.



7- Locate the connector numbered as P06A037-C

8- To its 21st pin do the operation explained below.

- 1- Strip the cable from its 5 cm away from the connector side.
- 2- Connect the diode's cathode pin to striped part of the cable.
- 3- Connect the diode's anode pin to nearest ground cable.

Uploading the up to date program(Kibes):

- 1- Park the vehicle to an area which is proper to work.

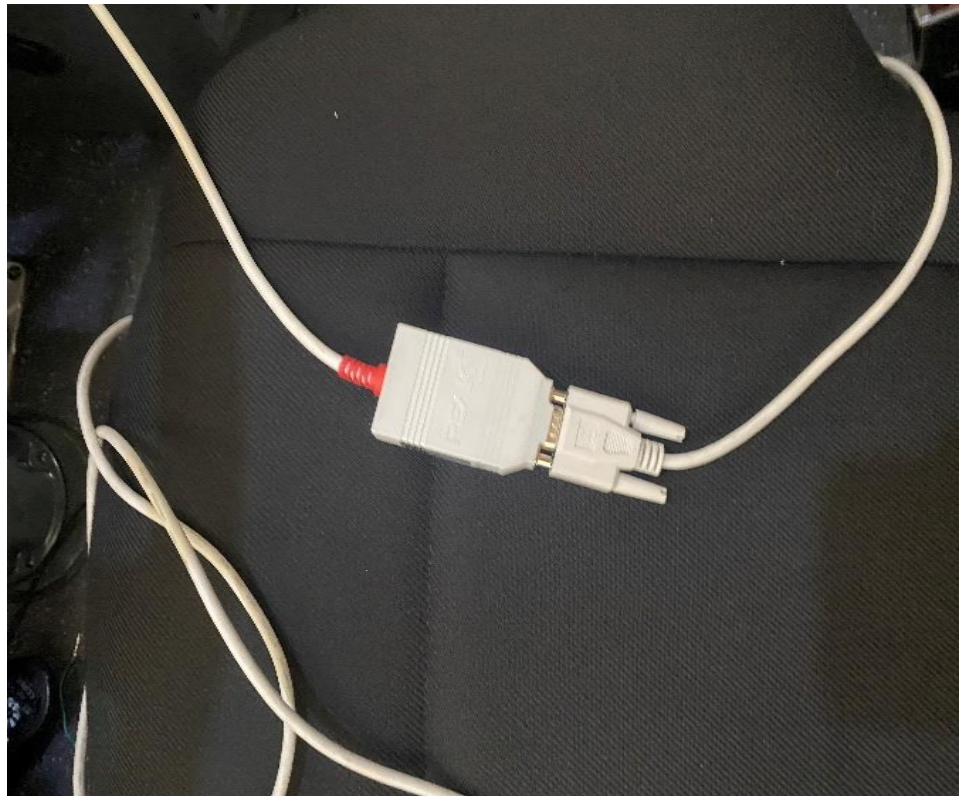
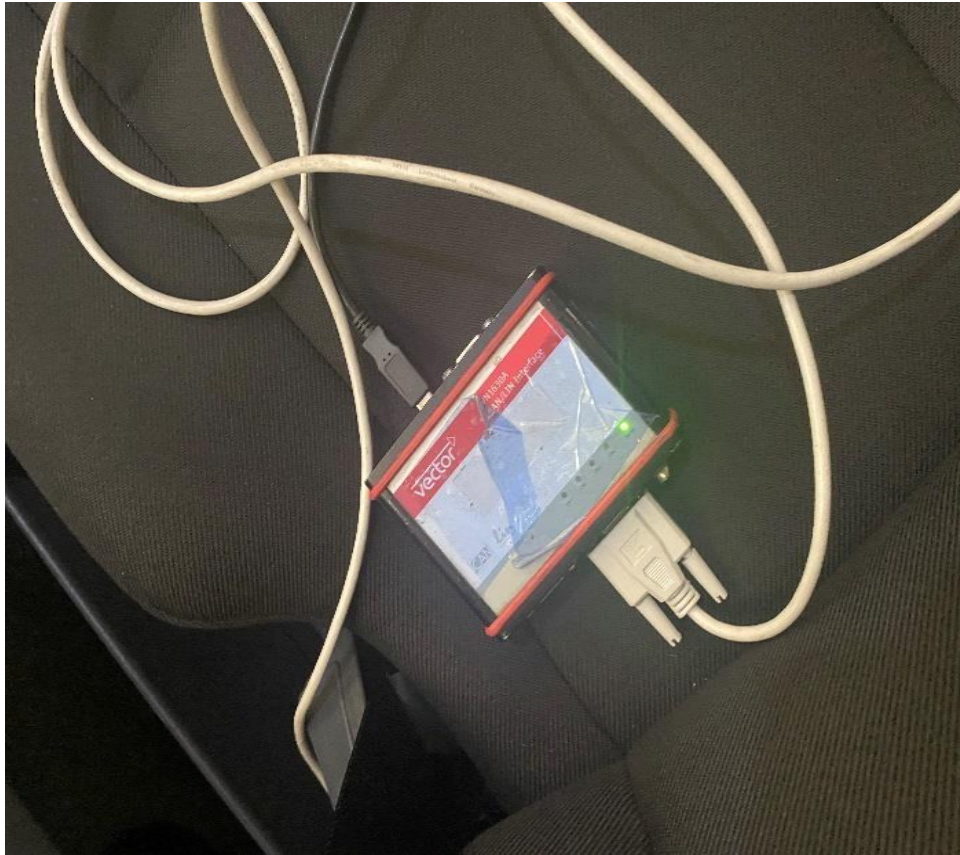


- 2- To install the KIBES software, locate the KIBES socket next to the OBD socket by looking at the label on the cover.

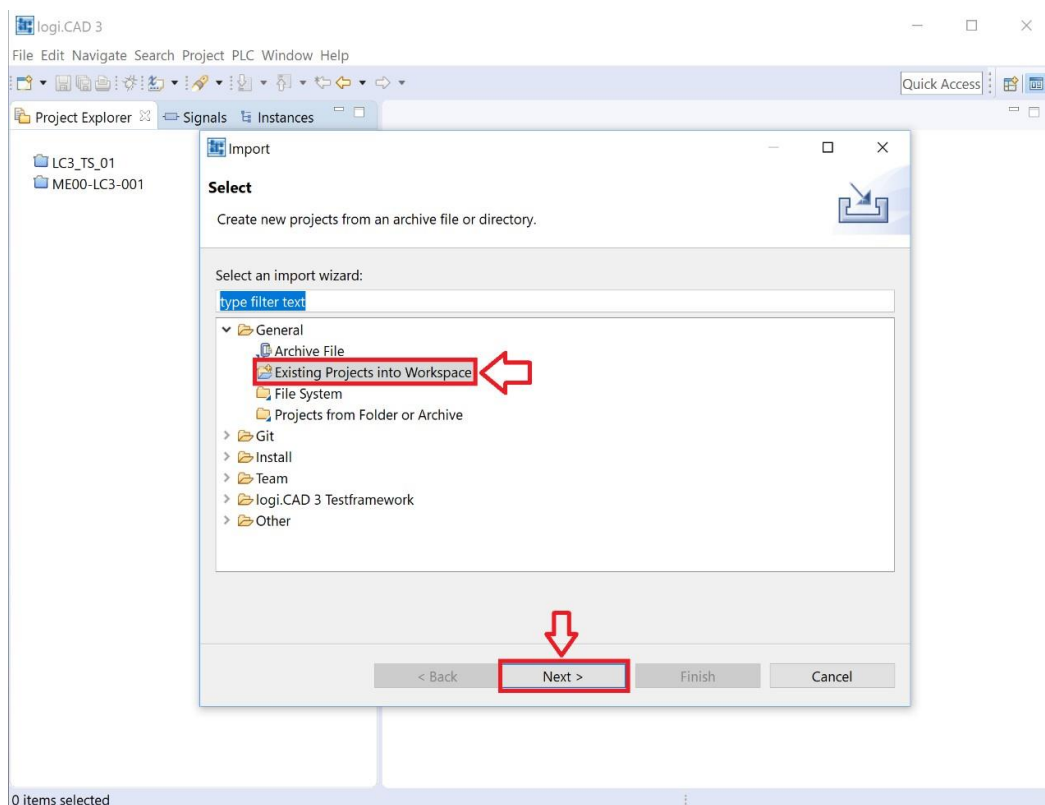
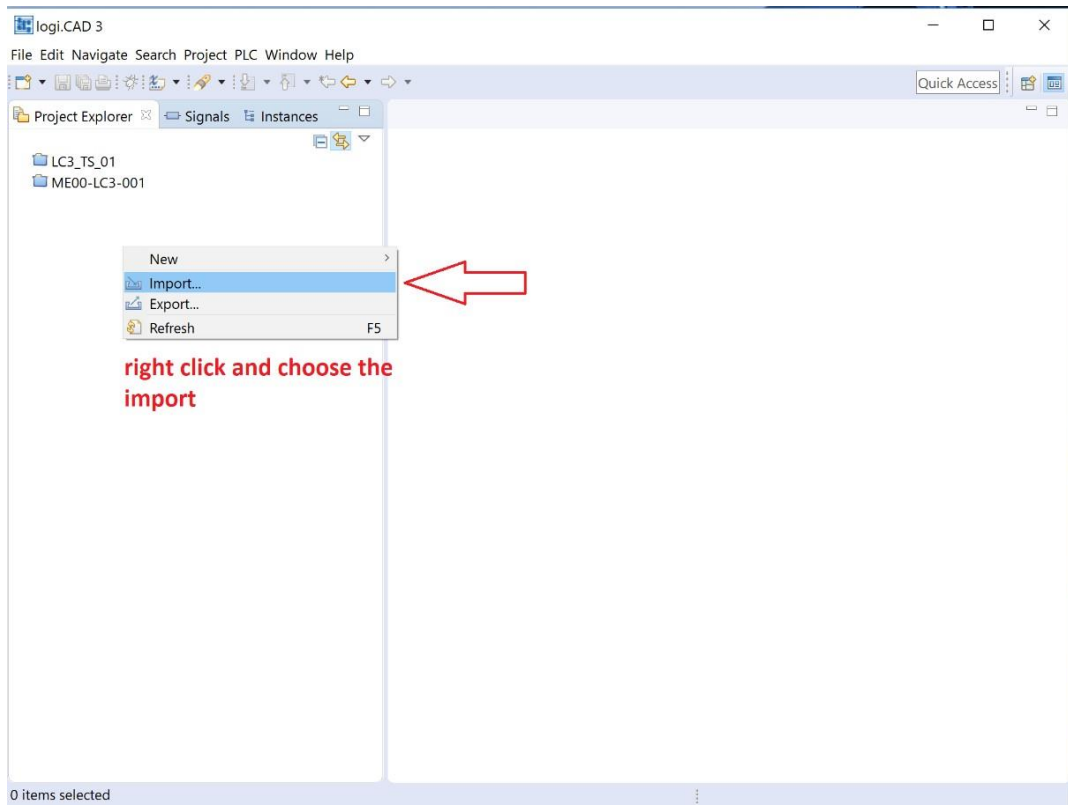


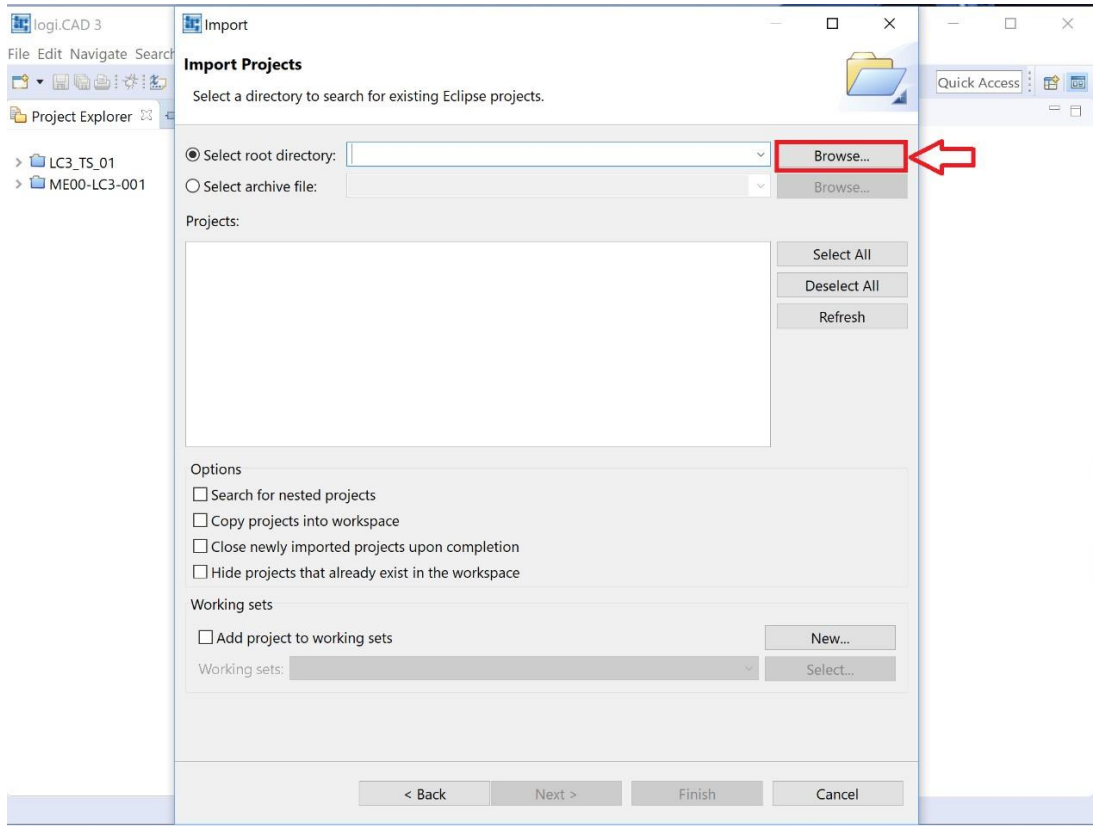
- 3- Connect one end of the KIBES cable to the CANalyzer or Peak cable and the other end to the KIBES diagnostic socket. Connect the CANalyzer or Peak output to the computer. Make sure that the KIBES dongle is inserted to your computer.



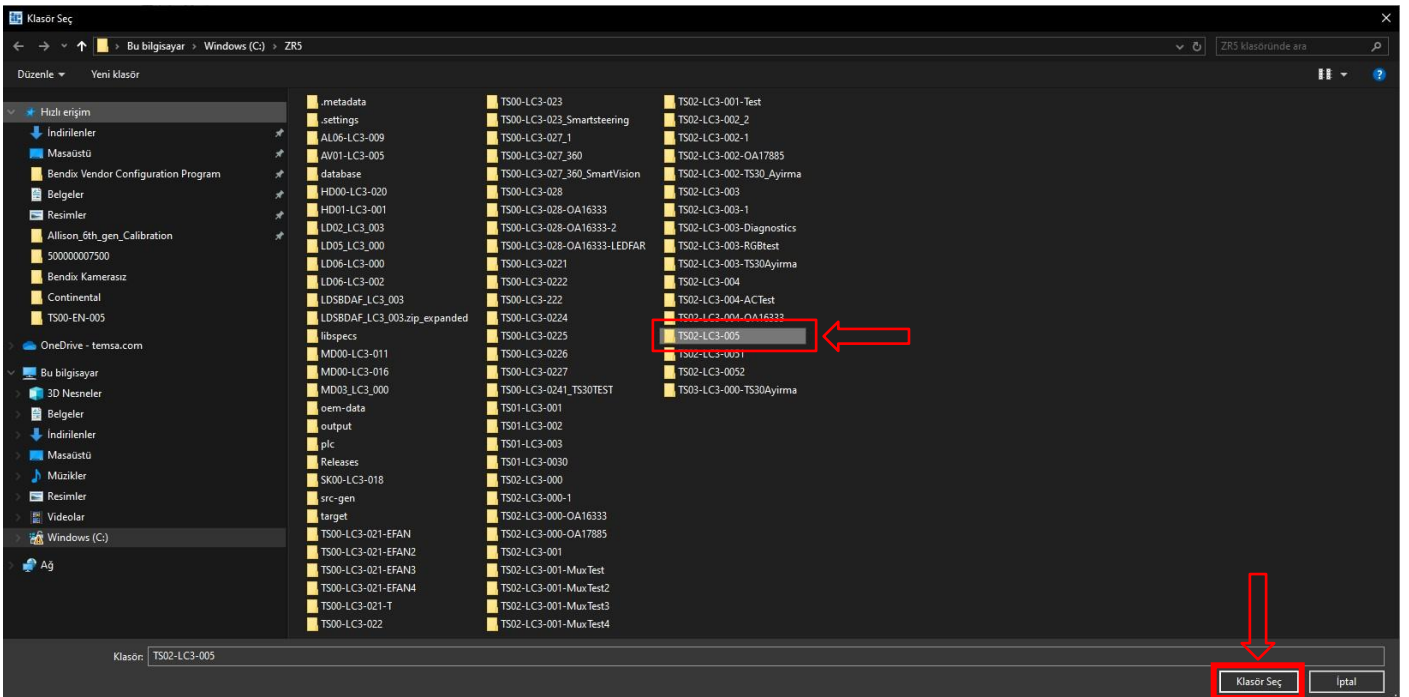


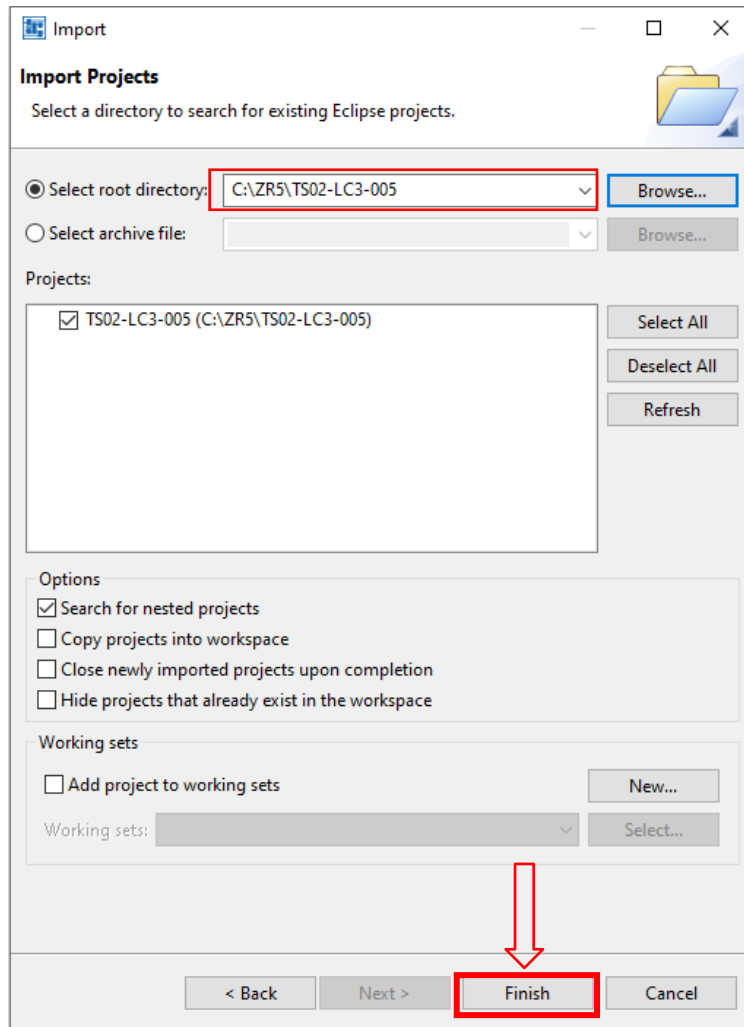
- 4- Install the KIBES software on the vehicle as described in the images. Turn the ignition switch on. Do not start the engine.



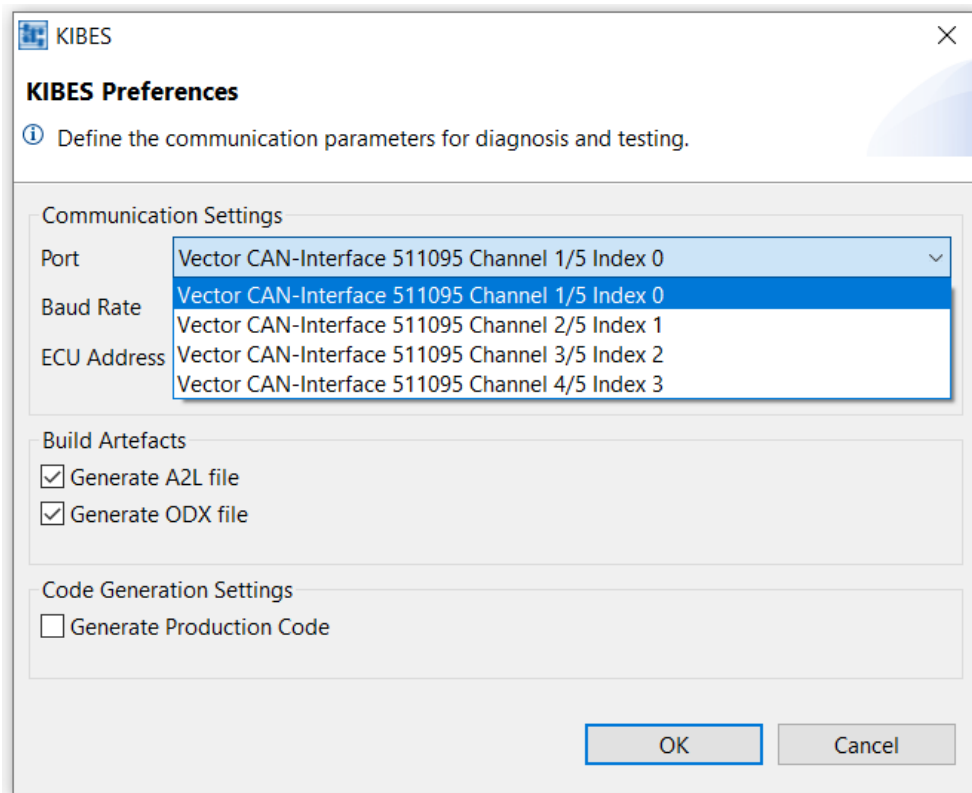
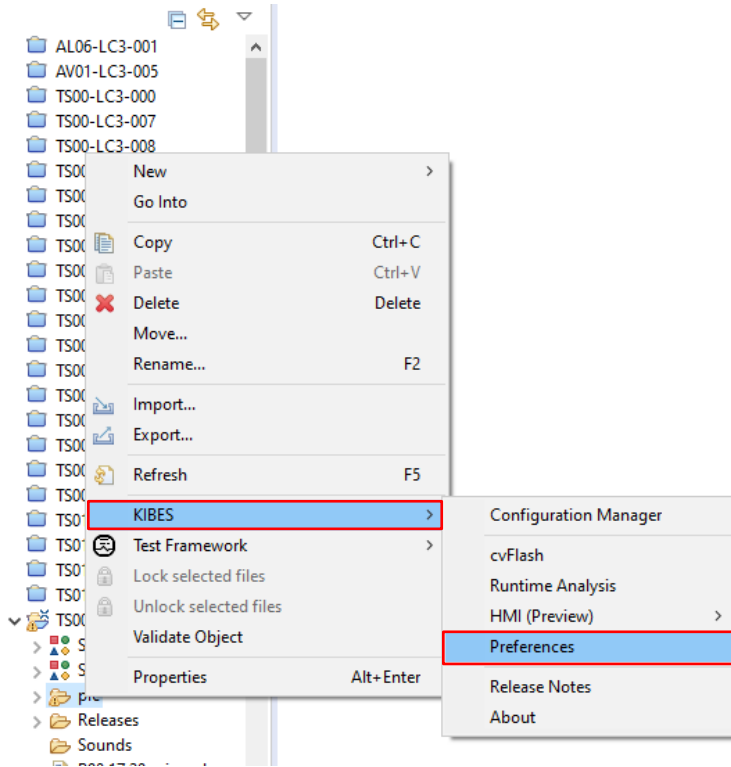


Hint: The software version must be selected correctly. The number shown in the picture may be representative.

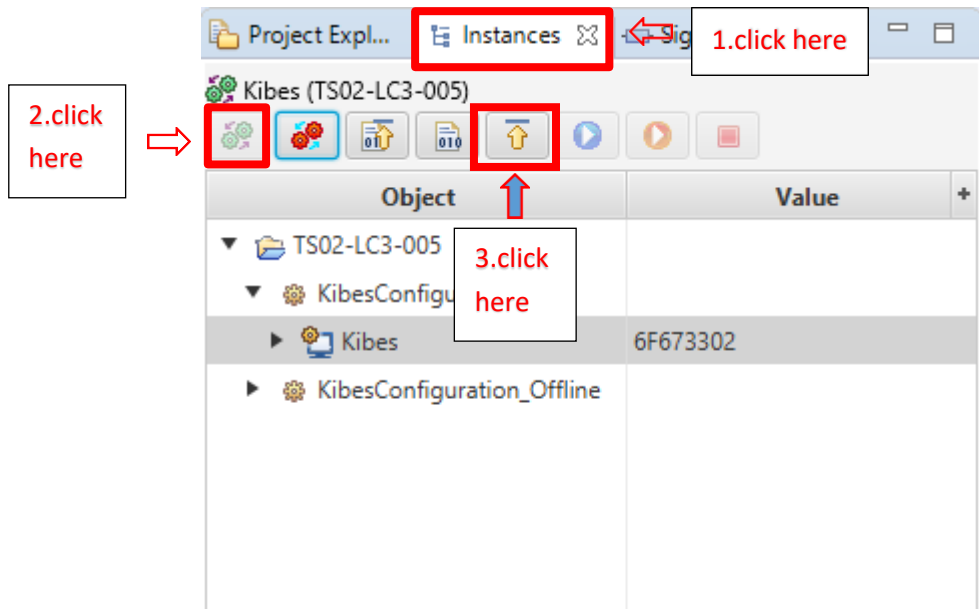




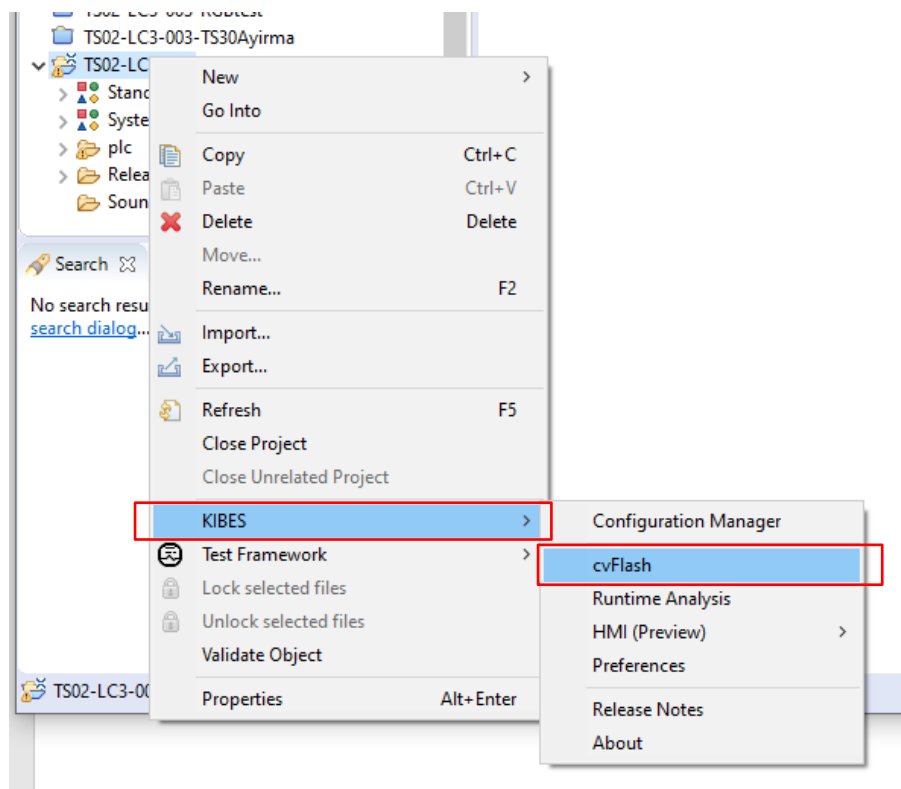
4.1- Click "Preferences" to check the **Baudrate** and **port**. (for TS Coachs 250000)

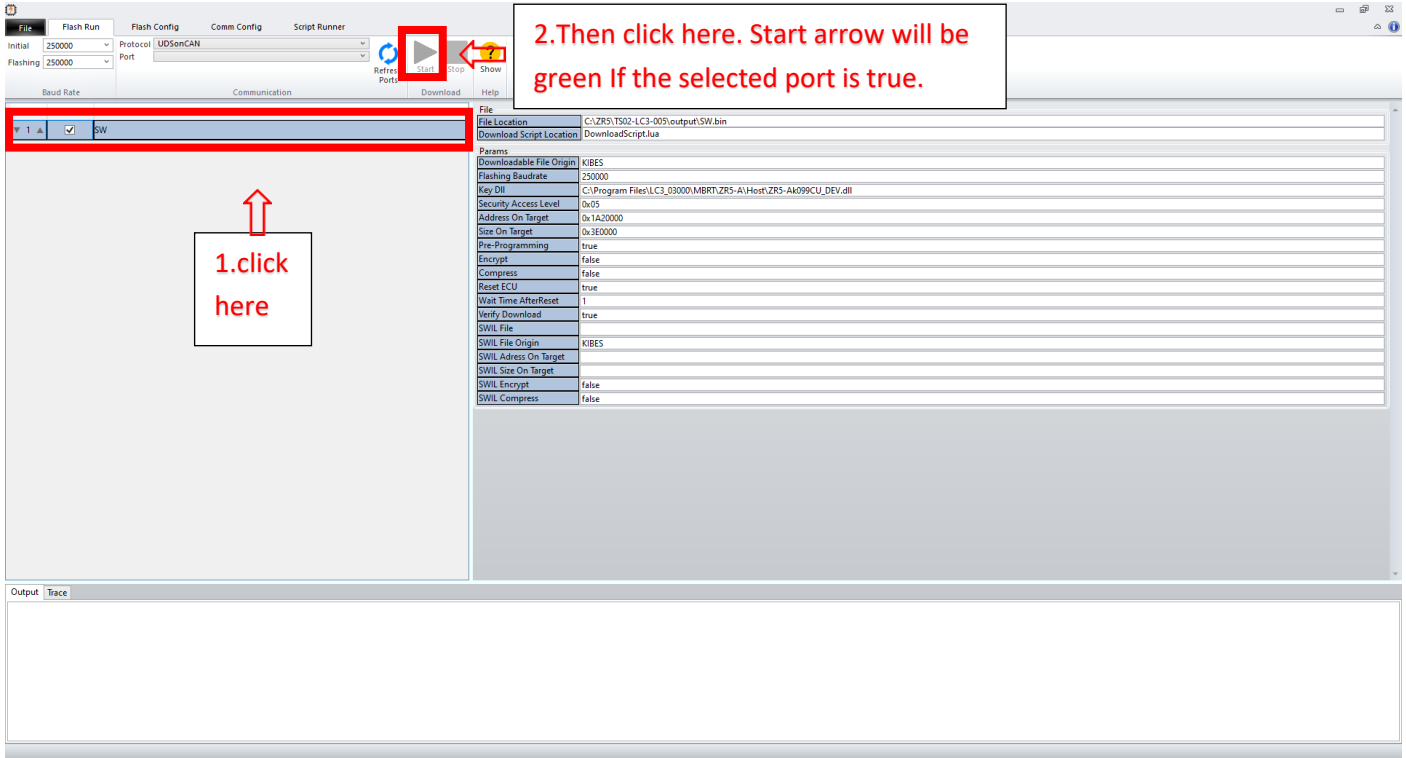


4.2- Click on the instructions shown in order in the picture.



4.3- If you get an error when you start loading of software, try CV flash download.





2. Then click here. Start arrow will be green if the selected port is true.

1. click here

Downloadable File Origin	Value
Downloadable File Origin	KIBES
Flashing Baudrate	250000
Key Oil	C:\Program Files\LC3_03000\MBRT\ZRS-AI\Host\ZRS-AK099CU_DEV.dll
Security Access Level	0x05
Address On Target	0x1A20000
Size On Target	0x3E0000
Pre-Programming	true
Encrypt	false
Compress	false
Reset ECU	true
Wait Time AfterReset	1
Verify Download	true
SWIL File	
SWIL File Origin	KIBES
SWIL Address On Target	
SWIL Size On Target	
SWIL Encrypt	false
SWIL Compress	false

Uploading the up to date program (Multiviu):

- 1-Park the vehicle to an area which is proper to work.
- 2-Connect your computer to the vehicle by using the CANalyzer interface. Plug the USB part into your computer and connect your CAN cable to the 9 pinned OBD port with the **D** pin low and the **C** pin high.

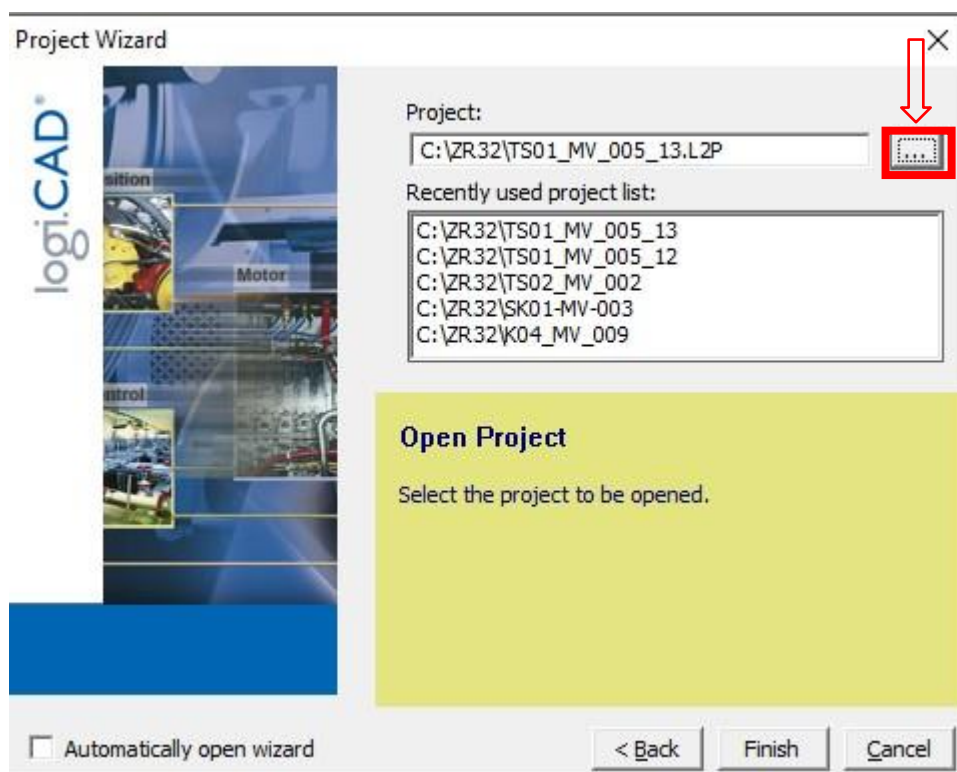
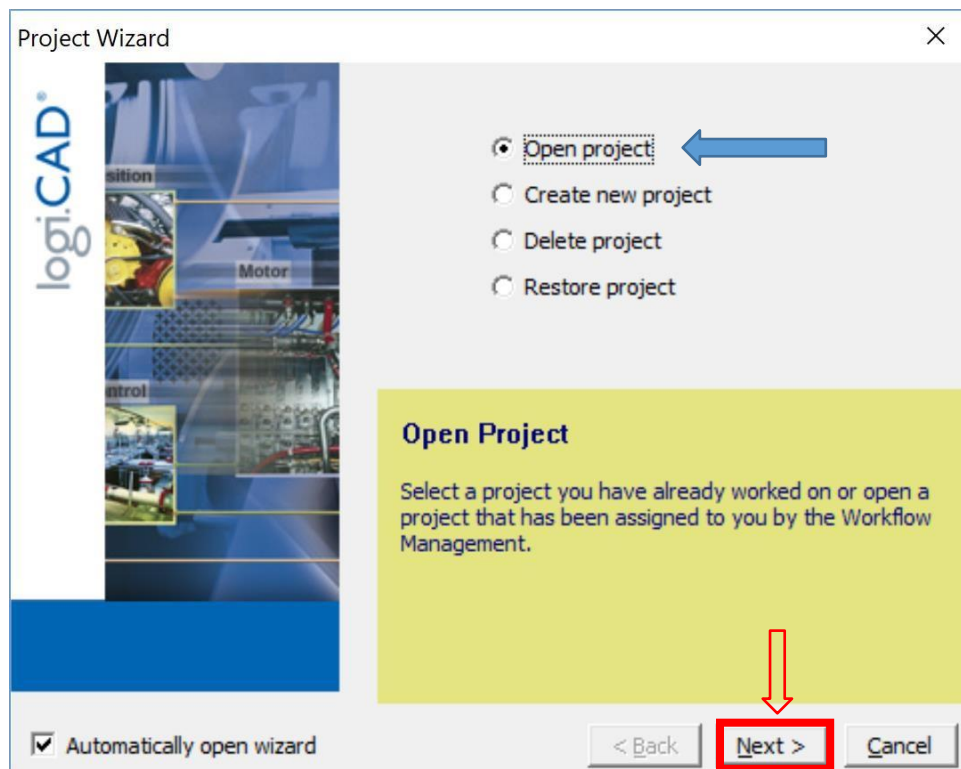


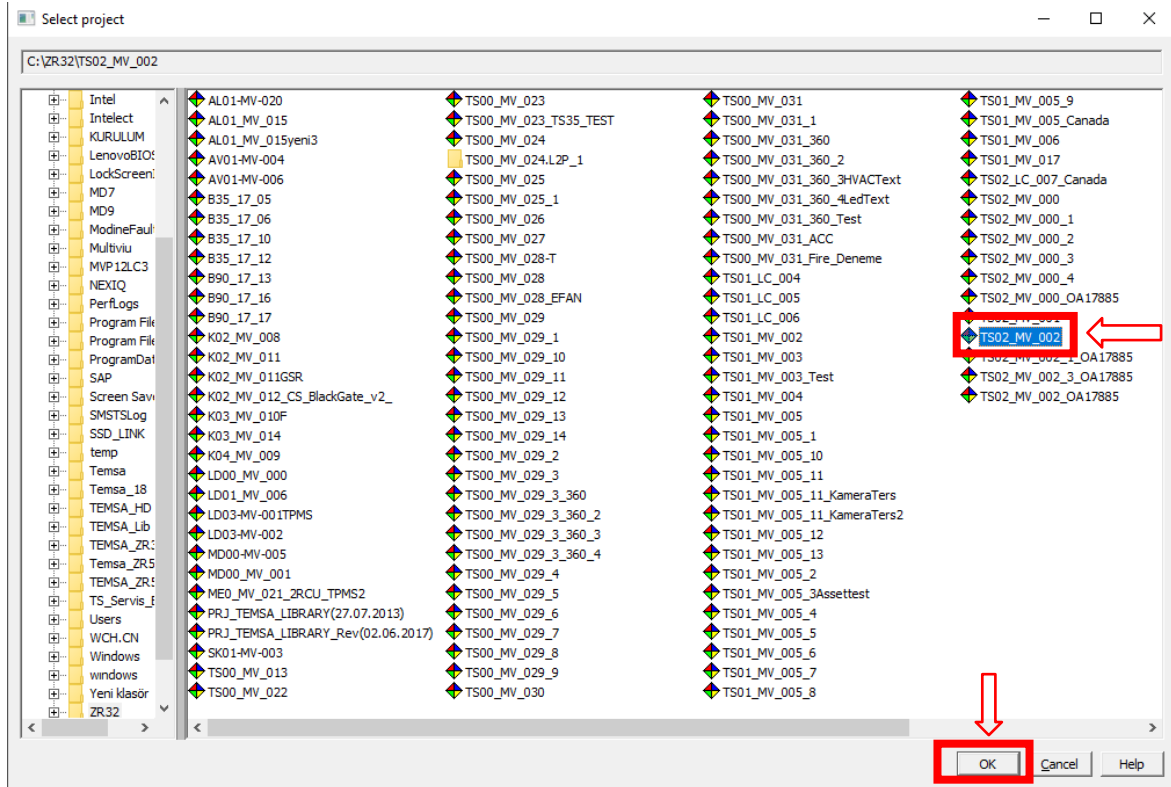


- 3- Turn the ignition switch on. Do not start the engine.
- 4- Make sure that the KIBES dongle is inserted to your computer.



5- Select the “Open Project” selection and click “next”.

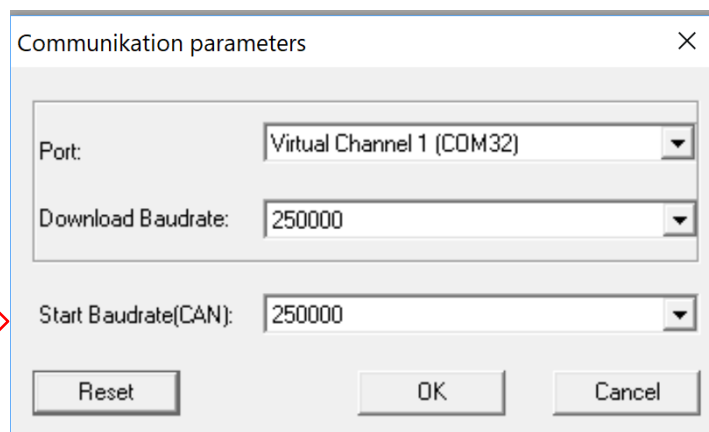
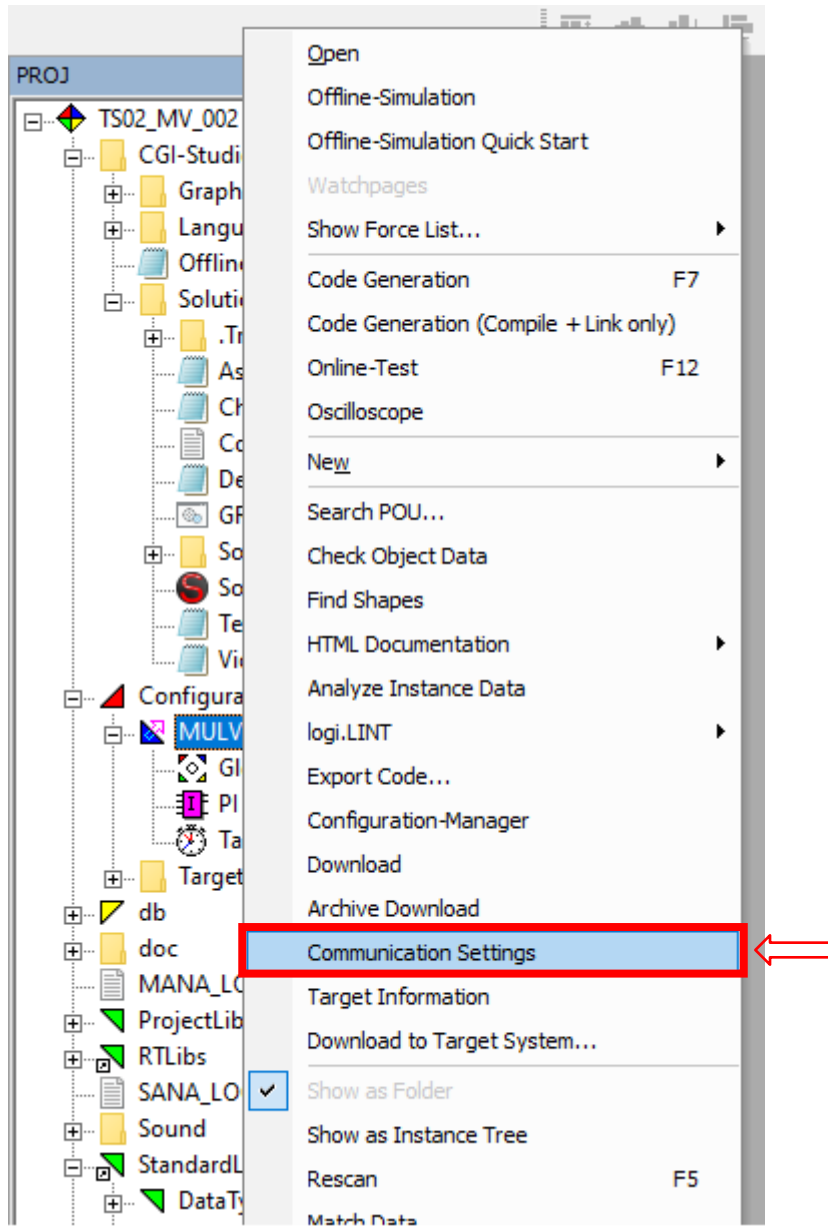




Make sure that right program is choosen.



6-Right click on Mulviu then click “Communication Settings” check the Port and Baudrate.



You can change
“Start Baudrate”
here



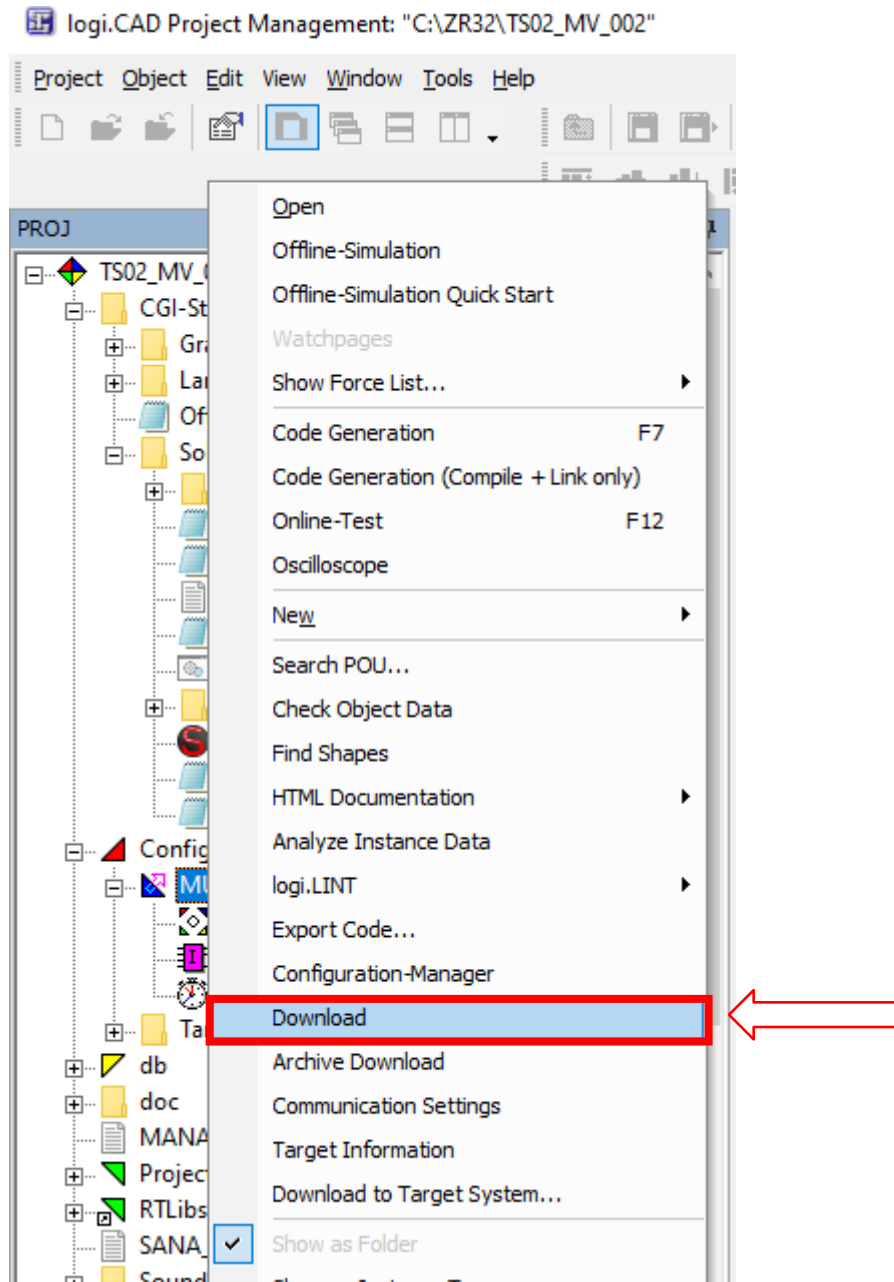
You can change port
here. Please make
sure correct port.



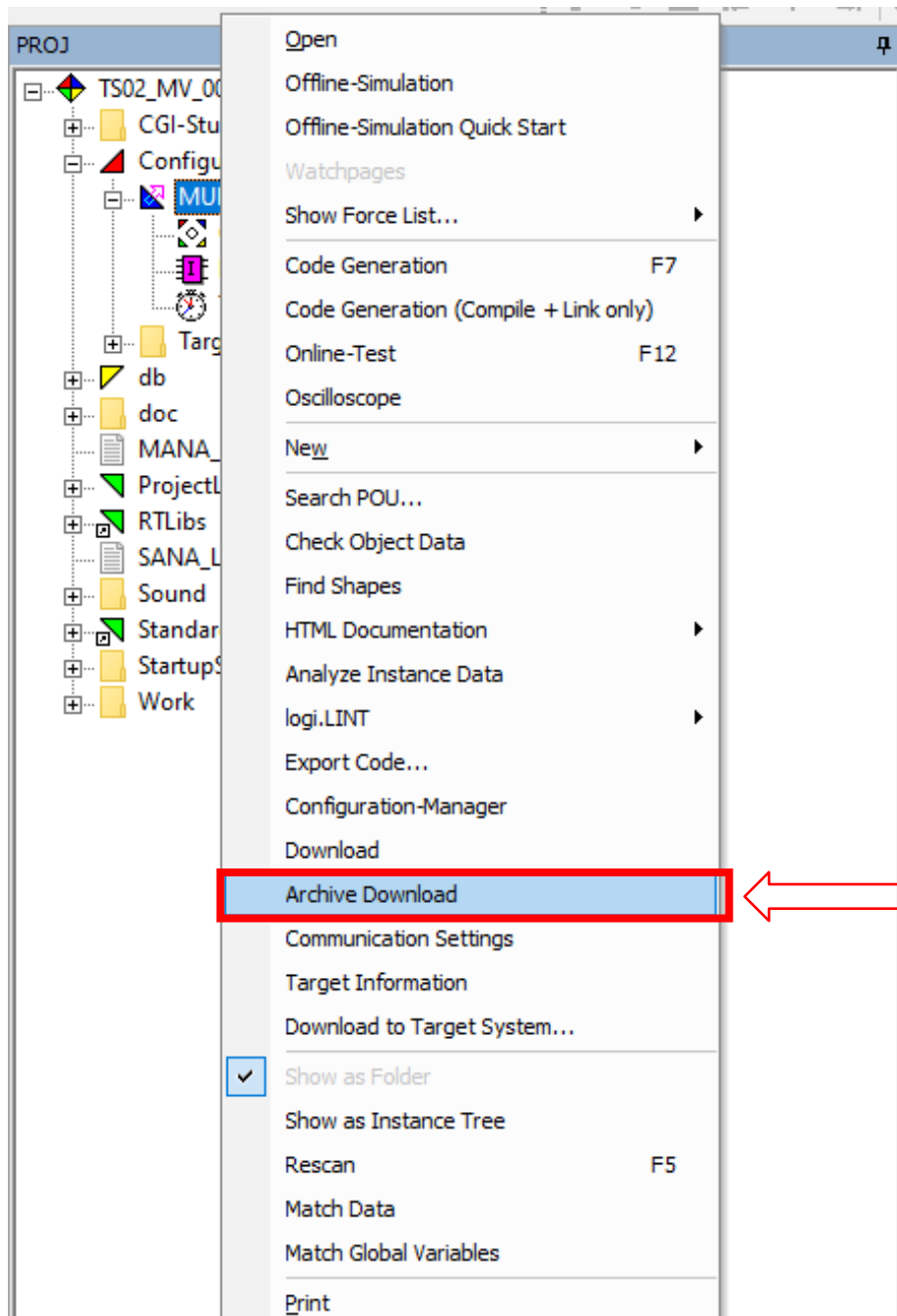
You can change
“Download
Baudrate” here

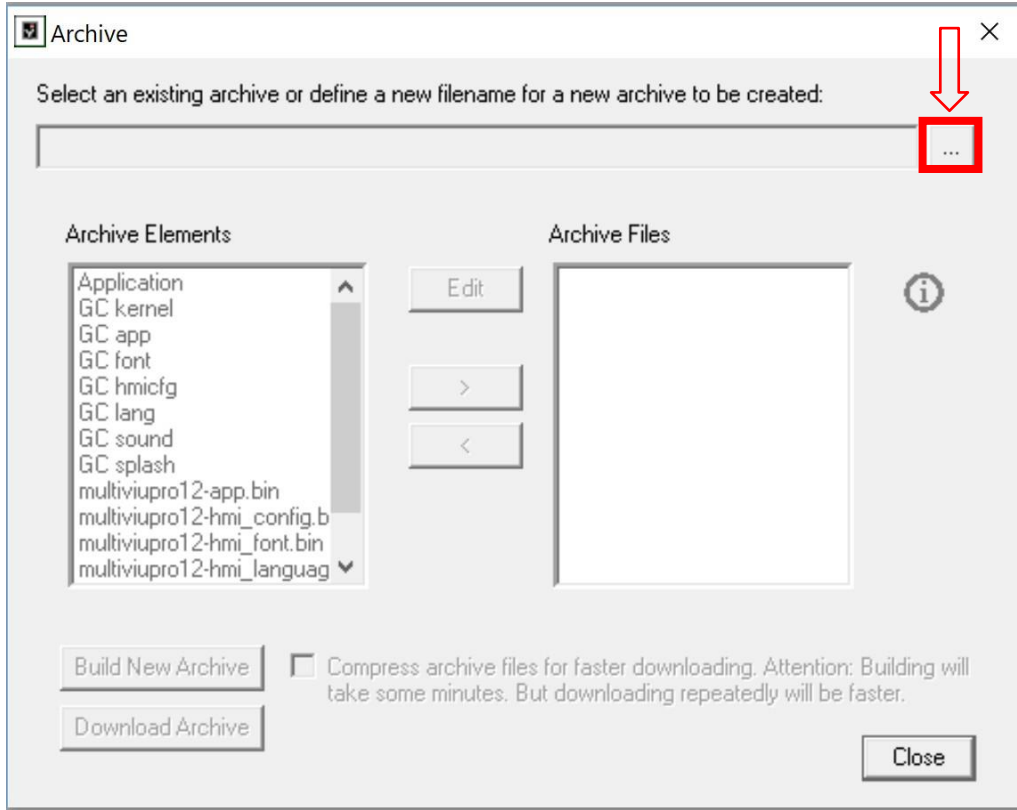


7-Then Right click on Mulviu, Download the logic side of the program.

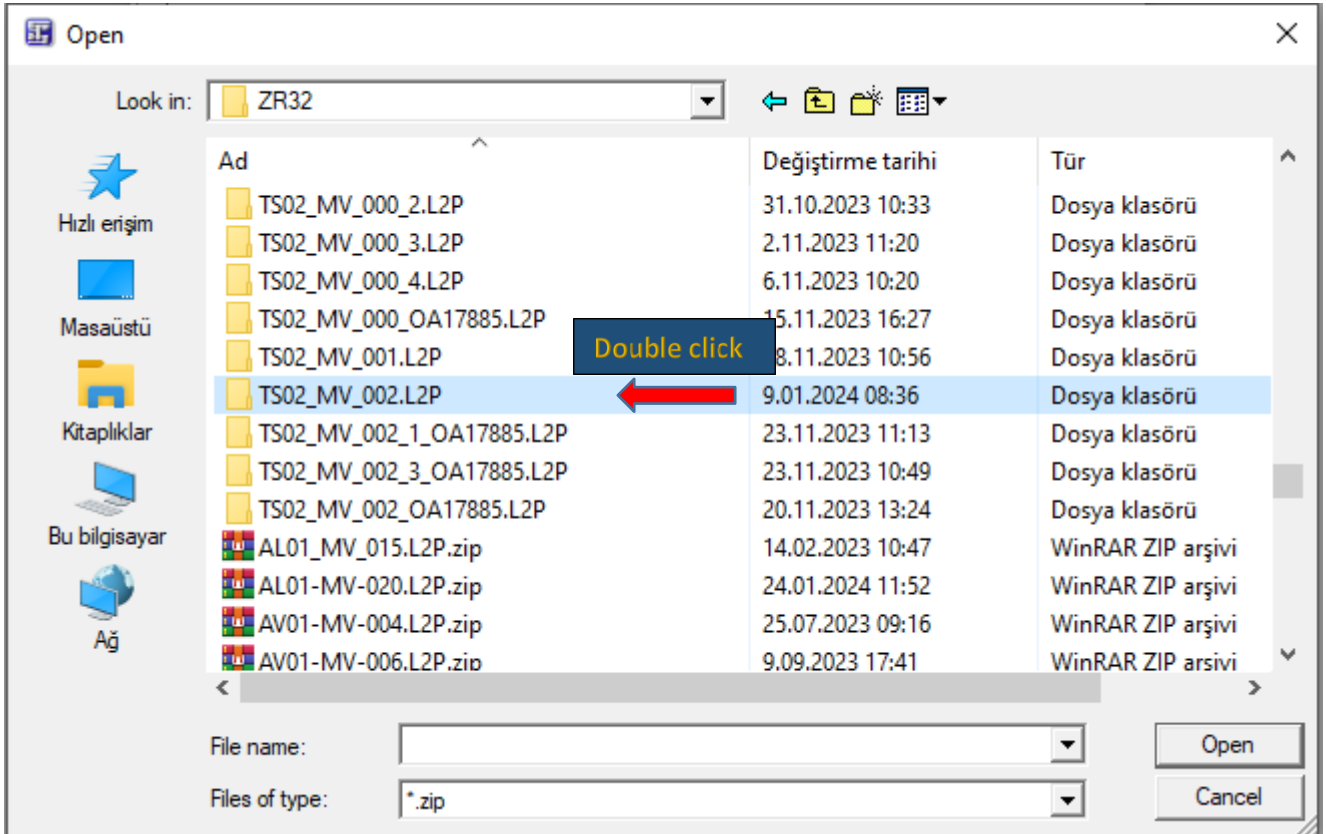


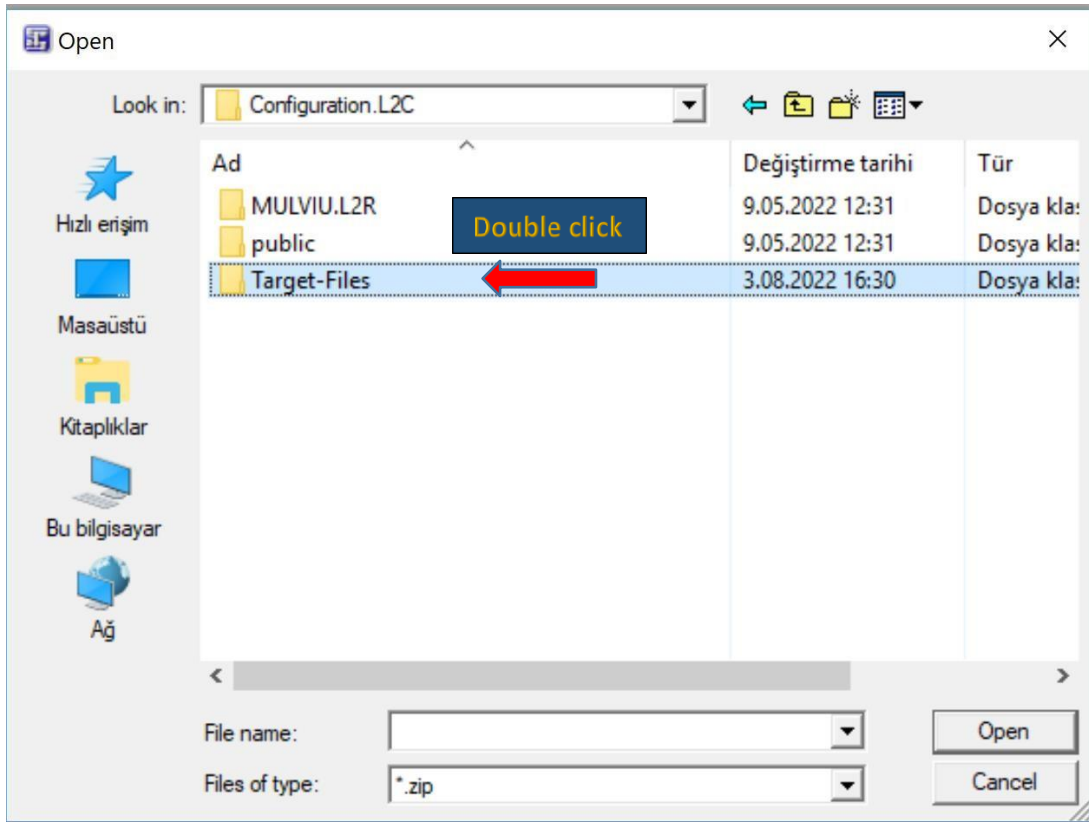
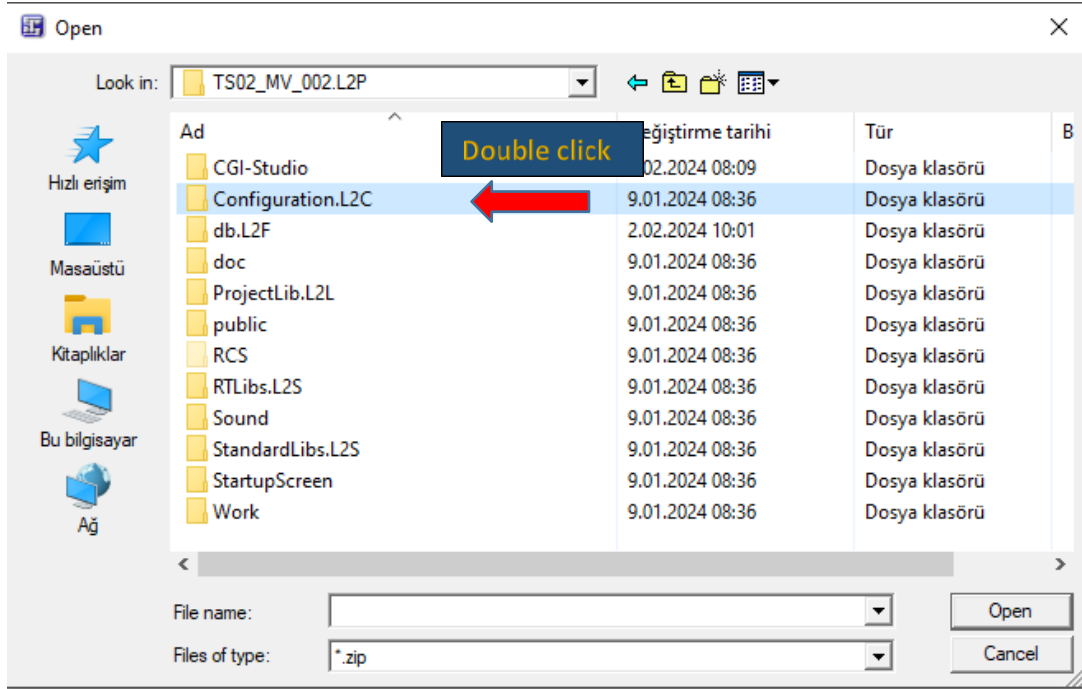
8-Right click on Mulviu again then click “Archive Download”



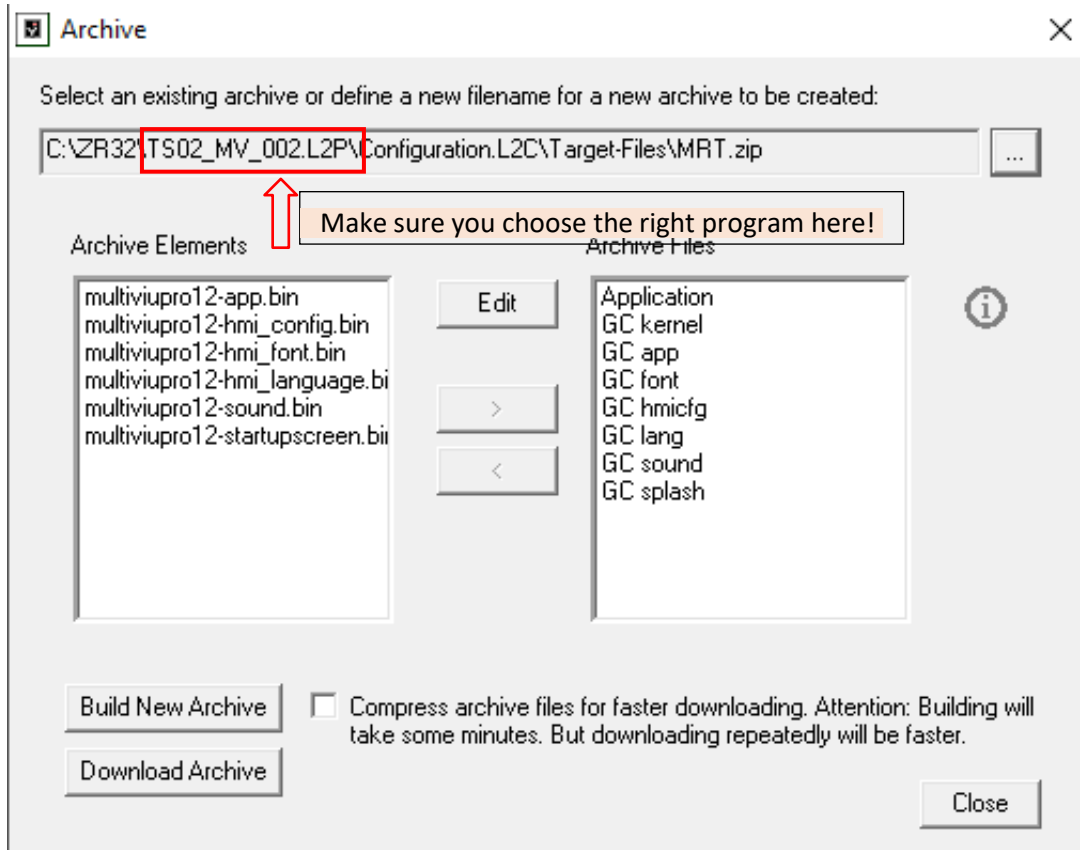
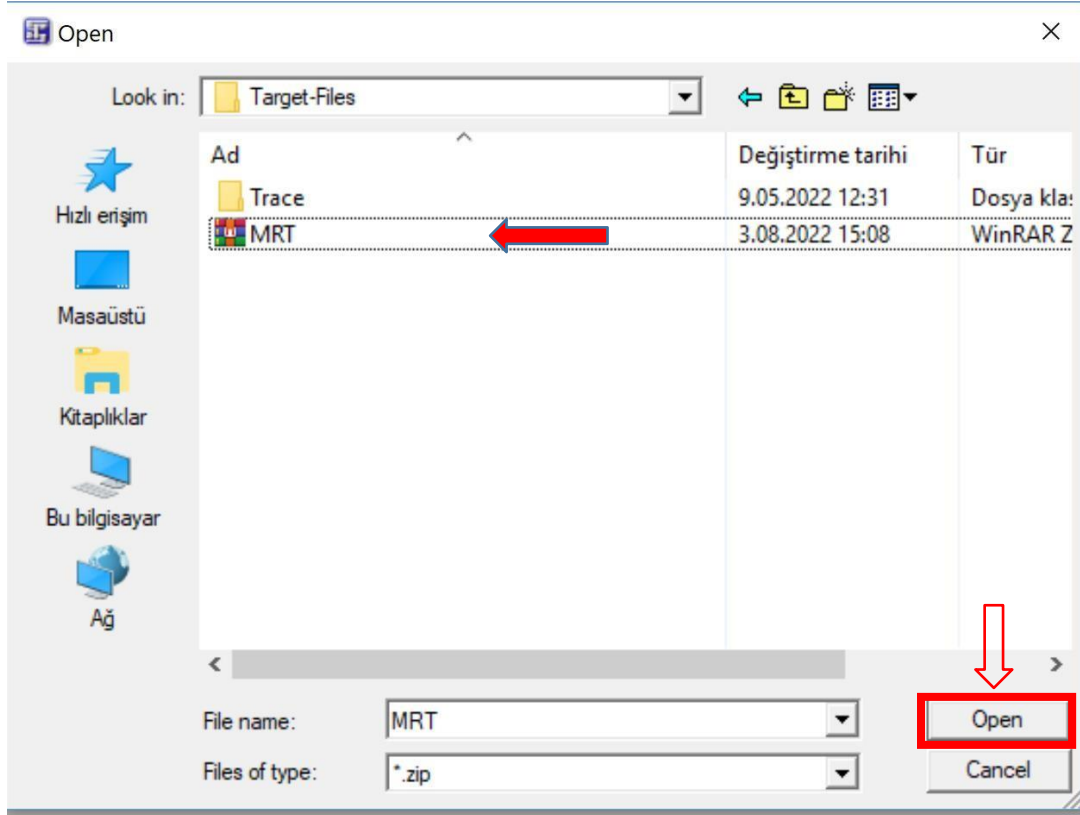


9- You should find program in your workspace then double click the program.

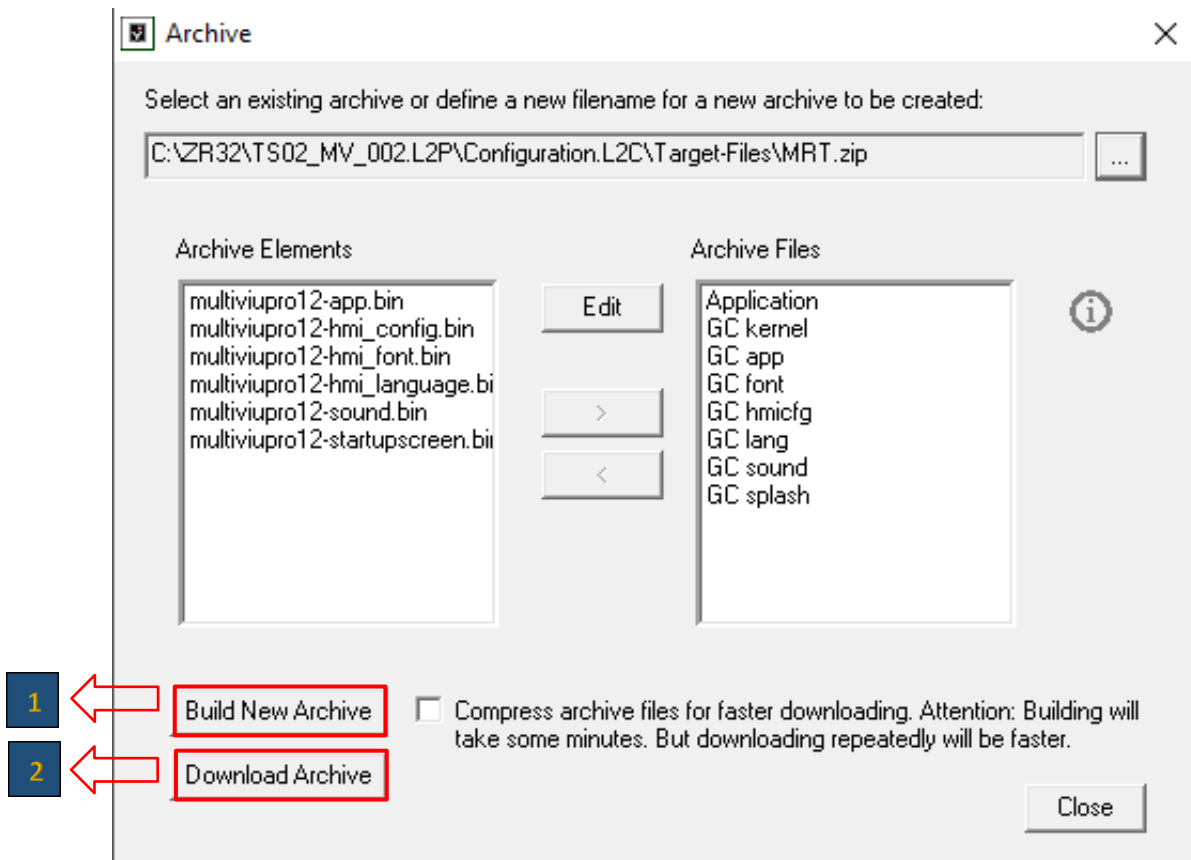




10- Click on “MRT” then click “Open”.



11- After the software is checked, click the “Build New Archive”, then click the “Archive Download”.



12- When a warning occurs, click OK, then wait for the program to be downloaded. Do not cut the power off during the download process, this could cause the body controller to dysfunction.

VEHICLE LIST

No	Otpa No	Chassis No	Model	Country
1.	OA15582	NLTEJXA92M1000328	TS45	USA
2.	OA15595	NLTEJXA94M1000329	TS45	USA
3.	OA16249	NLTEJXA96N1000334	TS45	USA
4.	OA16273	NLTEJXA99N1000330	TS45	USA
5.	OA16331	NLTEJXA90N1000331	TS45	USA
6.	OA16332	NLTEJXA92N1000332	TS45	USA
7.	OA16334	NLTEJXA98N1000335	TS45	USA
8.	OA16335	NLTEJXA9XN1000336	TS45	USA
9.	OA16336	NLTEJXA91N1000337	TS45	USA
10.	OA16342	NLTEJXA9XP1000338	TS45	CANADA
11.	OA16343	NLTEJXA95N1000339	TS45	USA
12.	OA16344	NLTEJXA91N1000340	TS45	USA
13.	OA16345	NLTEJXA93N1000341	TS45	USA
14.	OA16346	NLTEJXA95N1000342	TS45	USA
15.	OA16397	NLTEJXA97N1000343	TS45	USA
16.	OA16398	NLTEJXA95P1000344	TS45	USA
17.	OA16399	NLTEJXA90N1000345	TS45	USA
18.	OA16400	NLTEJXA92N1000346	TS45	USA
19.	OA16401	NLTEJXA94N1000347	TS45	USA
20.	OA16402	NLTEJXA92P1000348	TS45	USA
21.	OA16403	NLTEJXA94P1000349	TS45	USA
22.	OA16404	NLTEJXA90P1000350	TS45	CANADA
23.	OA16485	NLTEJXA92P1000351	TS45	USA
24.	OA16486	NLTEJXA94P1000352	TS45	USA
25.	OA16487	NLTEJXA96P1000353	TS45	USA
26.	OA16488	NLTEJXA98P1000354	TS45	USA
27.	OA16505	NLTEJXA9XP1000355	TS45	USA
28.	OA16506	NLTEJXA91P1000356	TS45	USA
29.	OA16507	NLTEJXA93P1000357	TS45	USA
30.	OA16508	NLTEJXA95P1000358	TS45	USA
31.	OA16509	NLTEJXA97P1000359	TS45	USA
32.	OA16527	NLTEJXA93P1000360	TS45	USA
33.	OA16528	NLTEJXA95P1000361	TS45	USA
34.	OA16529	NLTEJXA97P1000362	TS45	USA
35.	OA16530	NLTEJXA99P1000363	TS45	USA
36.	OA16531	NLTEJXA90P1000364	TS45	USA
37.	OA16542	NLTEJXA92P1000365	TS45	USA
38.	OA16543	NLTEJXA94P1000366	TS45	USA
39.	OA16544	NLTEJXA96P1000367	TS45	USA
40.	OA16555	NLTEJXA98P1000368	TS45	USA
41.	OA16556	NLTEJXA9XP1000369	TS45	USA
42.	OA16557	NLTEJXA96P1000370	TS45	USA
43.	OA16641	NLTEJXA98P1000371	TS45	USA
44.	OA16642	NLTEJXA9XP1000372	TS45	USA
45.	OA16643	NLTEJXA91P1000373	TS45	USA
46.	OA16644	NLTEJXA93P1000374	TS45	USA
47.	OA16645	NLTEJXA95P1000375	TS45	USA

No	Otpa No	Chassis No	Model	Country
48.	OA16646	NLTEJXA97P1000376	TS45	USA
49.	OA16647	NLTEJXA99P1000377	TS45	USA
50.	OA16727	NLTEJXA90P1000378	TS45	USA
51.	OA16728	NLTEJXA92P1000379	TS45	USA
52.	OA16736	NLTEJXA99P1000380	TS45	USA
53.	OA16737	NLTEJXA90P1000381	TS45	USA
54.	OA16745	NLTEJXA92P1000382	TS45	USA
55.	OA16783	NLTEJXA94P1000383	TS45	USA
56.	OA16784	NLTEJXA96P1000384	TS45	USA
57.	OA16785	NLTEJXA98P1000385	TS45	USA
58.	OA16786	NLTEJXA9XP1000386	TS45	USA
59.	OA16790	NLTEJXA91P1000387	TS45	USA
60.	OA16880	NLTEJXA93P1000388	TS45	USA
61.	OA16881	NLTEJXA95P1000389	TS45	USA
62.	OA16882	NLTEJXA91P1000390	TS45	USA
63.	OA16898	NLTEJXA93P1000391	TS45	USA
64.	OA16899	NLTEJXA95P1000392	TS45	USA
65.	OA16900	NLTEJXA97P1000393	TS45	USA
66.	OA16972	NLTEJXA91P1000423	TS45	USA
67.	OA16973	NLTEJXA99P1000394	TS45	USA
68.	OA16974	NLTEJXA90P1000395	TS45	USA
69.	OA16975	NLTEJXA92P1000396	TS45	USA
70.	OA16976	NLTEJXA94P1000397	TS45	USA
71.	OA16977	NLTEJXA96P1000398	TS45	USA
72.	OA16978	NLTEJXA98P1000399	TS45	USA
73.	OA16979	NLTEJXA90P1000400	TS45	USA
74.	OA17001	NLTEJXA92P1000401	TS45	USA
75.	OA17002	NLTEJXA94P1000402	TS45	USA
76.	OA17003	NLTEJXA94P1000433	TS45	USA
77.	OA17033	NLTEJXA96P1000434	TS45	USA
78.	OA17034	NLTEJXA96P1000403	TS45	USA
79.	OA17035	NLTEJXA98P1000404	TS45	USA
80.	OA17038	NLTEJXA9XP1000405	TS45	USA
81.	OA17100	NLTEJXA91P1000406	TS45	USA
82.	OA17101	NLTEJXA93P1000407	TS45	USA
83.	OA17102	NLTEJXA95P1000408	TS45	USA
84.	OA17125	NLTEJXA97P1000409	TS45	USA
85.	OA17126	NLTEJXA93P1000410	TS45	USA
86.	OA17155	NLTEJXA95P1000411	TS45	USA
87.	OA17175	NLTEJXA97P1000412	TS45	USA
88.	OA17176	NLTEJXA99P1000413	TS45	USA
89.	OA17198	NLTEJXA90P1000414	TS45	USA
90.	OA17199	NLTEJXA92P1000415	TS45	USA
91.	OA17213	NLTEJXA94P1000416	TS45	USA
92.	OA17214	NLTEJXA96P1000417	TS45	USA
93.	OA17282	NLTEJXA94R1000418	TS45	USA
94.	OA17283	NLTEJXA96R1000419	TS45	USA
95.	OA17284	NLTEJXA92R1000420	TS45	USA
96.	OA17285	NLTEJXA94R1000421	TS45	USA
97.	OA17286	NLTEJXA96R1000422	TS45	USA

No	Otpa No	Chassis No	Model	Country
98.	OA17361	NLTEJXA9XR1000424	TS45	USA
99.	OA17362	NLTEJXA91R1000425	TS45	USA
100.	OA17363	NLTEJXA93R1000426	TS45	USA
101.	OA17364	NLTEJXA95R1000427	TS45	USA
102.	OA17365	NLTEJXA97R1000428	TS45	USA
103.	OA17366	NLTEJXA99R1000429	TS45	USA
104.	OA17367	NLTEJXA95R1000430	TS45	USA
105.	OA17368	NLTEJXA97R1000431	TS45	USA
106.	OA17369	NLTEJXA99R1000432	TS45	USA
107.	OA17690	NLTEJXA94R1000435	TS45	USA
108.	OA17691	NLTEJXA96R1000436	TS45	USA
109.	OA17692	NLTEJXA98R1000437	TS45	USA
110.	OA17693	NLTEJXA9XR1000438	TS45	USA
111.	OA17729	NLTEJXA91R1000439	TS45	USA
112.	OA17730	NLTEJXA98R1000440	TS45	USA
113.	OA17731	NLTEJXA9XR1000441	TS45	USA
114.	OA17765	NLTEJXA91R1000442	TS45	USA
115.	OA17766	NLTEJXA93R1000443	TS45	USA
116.	OA17767	NLTEJXA95R1000444	TS45	USA
117.	OA17768	NLTEJXA97R1000445	TS45	USA
118.	OA17769	NLTEJXA99R1000446	TS45	USA
119.	OA17770	NLTEJXA90R1000447	TS45	USA
120.	OA17771	NLTEJXA92R1000448	TS45	USA
121.	OA17811	NLTEJXA94R1000449	TS45	USA
122.	OA17812	NLTEJXA90R1000450	TS45	USA
123.	OA17813	NLTEJXA92R1000451	TS45	USA
124.	OA17814	NLTEJXA94R1000452	TS45	USA
125.	OA17815	NLTEJXA96R1000453	TS45	USA
126.	OA17816	NLTEJXA98R1000454	TS45	USA
127.	OA17817	NLTEJXA9XR1000455	TS45	USA
128.	OA17850	NLTEJXA91R1000456	TS45	USA
129.	OA17851	NLTEJXA93R1000457	TS45	CANADA
130.	OA17852	NLTEJXA95R1000458	TS45	CANADA
131.	OA17853	NLTEJXA97R1000459	TS45	USA
132.	OA17854	NLTEJXA93R1000460	TS45	USA
133.	OA17855	NLTEJXA95R1000461	TS45	USA
134.	OA17856	NLTEJXA97R1000462	TS45	USA
135.	OA17884	NLTEJXA99R1000463	TS45	USA
136.	OA17886	NLTEJXA92R1000465	TS45	USA
137.	OA17887	NLTEJXA94R1000466	TS45	USA

LABOR BREAKDOWN

Application	Time
Downloading ZR5 Kibes Program	5m
Downloading Multiviu Program	5m
Archive Downloading of Multiviu	40m
Implementing Diodes	70m
Total Labor Time	120m