

## **8 SCHEDULED MAINTENANCE**

The operator shall perform the daily inspection of the tractor for preventing the loosening of the joints, holders and fasteners, leaks of the coolant and oil, for removing the dirtying of the tractor's mechanisms as well as carry out the scheduled maintenance for ensuring the tractor operability, fire safety and safety in fulfilling various missions as a part of the machine-tractor aggregate.

Engine crankcase/		
Lubrication system		18/22
Engine cooling system		31
Transmission		47
Fuel pump*		0.25
FDA wheel reduction gear box (each)		2.0
FDA main drive		5.0 (5.5)*
Hydraulic system oil reservoir		35
HPS oil reservoir		12
Fuel tanks (2 off)	270	Fuel tanks (2 off)
Hydraulic actuator of the clutch and service brakes	1523/	Hydraulic actuator of the clutch and service brakes

\* For the FDA with a cast-in-block beam.

\*\* In case of installation of a new or over-hauled fuel pump

### **SCHEDULED MAINTENANCE CHART\***

Oper. No.	Operation description	Intervals, hours					
		10	125	250	500	1000	2000
1	Checking the oil level in the engine	X					
2	Checking the coolant level in the engine	X					
3	Checking the oil level in the transmission	X					
4	Checking the oil level in the HPS oil tank	X					
5	Checking the oil level in the RHL oil tank	X					
6	Checking the brake liquid level in the master cylinder tanks of the hydraulic actuator of the clutch and the brakes	X					
6a	Checking the brake liquid level in the	X					

Oper. No.	Operation description	Intervals, hours					
		10	125	250	500	1000	2000
	compensation chamber of the master cylinder for controlling the clutch and brakes in the reverse						
7	Drain condensate from the pneumatic system bottle	X					
8	Checking brake for proper operation, operability of the engine, steering controls, lighting and signalling devices in the motion	X					
8a*	Checking the fastening of the air-conditioner hoses	X					
8b*	Checking/cleaning the air-conditioner condenser	X					
8c*	Checking the draining tubes of the air conditioner/cleaning them from condensate	X					
8d	Removing condensate from the reservoirs of the radiator of the charge air cooler (CAC) of the engine (BELARUS-1523.3/1523B.3)	X in winter	X in winter				
8e	Cleaning the radiator of the charge air cooler (CAC) of the engine (BELARUS-1523.3/1523B.3)	X					
9*	Checking/adjusting the tension of the air-conditioner compressor driving belt		X				
9a	Greasing the pivot points of the HPS cylinders		X				
10	Greasing the bearings of the axle of the FDA pivots		X				
11	Draining the sediment and sludge from the fuel tanks and the fuel course filter		X				
12	Checking the tension of the alternator driving belt		X				
13	Checking the tyre inflation pressure		X				
13a	Checking the tightening of fasteners of the hubs and wheels		X				
14	Checking and adjusting the clutch control mechanism		X				
15	Checking the engine air cleaner		X				
15a	Clean the filter of the cab ventilation and heating system		X				
15b	Checking the tightening of the bolts of the CAC Air Ducts		X				
16	Greasing the clutch release yoke bearing			X			
17	Cleaning the rotors of the centrifugal oil filters of the engine and the gear-box			X			
18				X			
19	Washing the screen filter in the gear-box hydraulic system			X			
20	Changing oil in the engine crankcase			X			
21	Changing the replaceable filter element on the engine oil filter			X			
23	Checking the oil level in the front PTO reduction			X			

\* If the air conditioner is installed.

Oper. No.	Operation description	Intervals, hours					
		10	125	250	500	1000	2000
	gear box (if installed)						
24	Checking the front wheels for toe-in			X			
25	Checking the oil level in the final drive and hub reduction gear housings			X			
26	Checking the turbocharger for tightening of fasteners			X			
27	Checking and adjusting the clearances in the engine valves				X		
28	Draining sediment and sludge from the fuel fine filter				X		
29	Checking the steering wheel for play				X		
30	Checking the FDA flange bearings for clearances				X		
31	Adjusting the travel of the brake pedals and parking-reserve brake lever				X		
32	Servicing the storage batteries				X		
33	Changing the replaceable filter element in the oil tank of the RHL hydraulic system				X		
34	Changing the replaceable filter element in the oil tank of the HPS hydraulic system				X		
35	Checking the alternator fastening bolts for proper tightening				X		
36	Check the plays in the steering link joints				X		
37	Checking the joints of the air cleaner and the engine intake duct for leak-tightness				X		
38	Checking the pneumatic system for leak-tightness				X		
39	Checking the bolts of clamps of the CAC air ducts for tightening (BELARUS-1523.3/1523B.3)				X		
40	Changing the oil in the RHL hydraulic system oil tank				X		
41	Checking the clearances in bearings of the hub reduction gear driving pinion and the FDA pivot axles				X		
41a	Replacement of the drying filter	After every 800 hours of operation or once a year					
42	Checking the cylinder head fastening bolts for proper tightening					X	
42a	Changing the brake fluid in the clutch and brake actuator					X	
43	Checking the external bolted joints for proper tightening					X	
44	Cleaning the fuel coarse filter					X	
45	Washing the engine turbocharger					X	
46	Changing oil in the transmission housing					X	
47	Changing oil in the HPS oil reservoir					X	
48	Replacement of the filter element in the fuel fine filter					X	
49	Checking the alternator					X	
50	Changing oil in the FDA hub reduction gear and the final drive					X	

Oper. No.	Operation description	Intervals, hours					
		10	125	250	500	1000	2000
51	Changing oil in the front PTO reduction gear-box (if installed)					X	
52	Checking the condition of the brakes					X	
53	Greasing the bushings of the rear (front) hitch linkage turn shaft and of the hauling mechanism					X	
54	Servicing the air-cleaner					X	
56	Checking the fuel injection equipment						X
57	Checking the technical condition of the starter						X
58	Washing the engine breathers						X
59	Flushing the engine cooling system						X
<b>Maintenance to be performed as required:</b>							
60	Adjusting the oil pressure in the engine						
61	Adjusting the relief valve centrifugal oil filter of the gear-box						
62	Checking/Adjusting the front wheels toe-in						
63	Adjusting external headlights						

### Sequence of the Maintenance Operations

The operator shall perform the daily inspection of the tractor for preventing the loosening of the joints, holders and fasteners, leaks of the coolant and oil, for removing the dirtying of the tractor's mechanisms as well as other preventive works for ensuring the tractor operability, fire safety and safety in fulfilling various missions as a part of the machine-tractor aggregate.

Prior to performing the maintenance works, remove the engine side panels and raise the bonnet. To do this:

The mask and hood are hinged on supports located on the front frame immediately after the heat exchanger of the engine cooling unit. The fastening of the mask and hood is designed to quickly open them and thus have a quick access to separate units of the tractor.

**To remove the left side** (4) (pic. 8.2) open two locks 7 on the left side and remove the side 4.

**To remove the right side** 5, open two locks 7 on the right side and remove the side

5. To open the hood 3 and lock it open, proceed as follows:

- close the mask 2 if it was open;
- remove the monocyclone 1;
- open the lock 15 by pulling the cable 9;
- take the edge of the hood 3 (near the cab) and open it to the uppermost position;
- lock the hood 3 with the arm 12 in the bracket 13.

**To open the mask 2 and lock it raised**, proceed as follows:

- close the hood 3 if it was open;
- open the lock 8 by pulling the cable 6;
- take the lower edge of the mask 2 and open it to the uppermost position;
- lock the mask 3 with the arm 11 in the bracket 10.

**DO NOT OPEN THE HOOD 3 AND MASK 2 AT THE SAME TIME.**

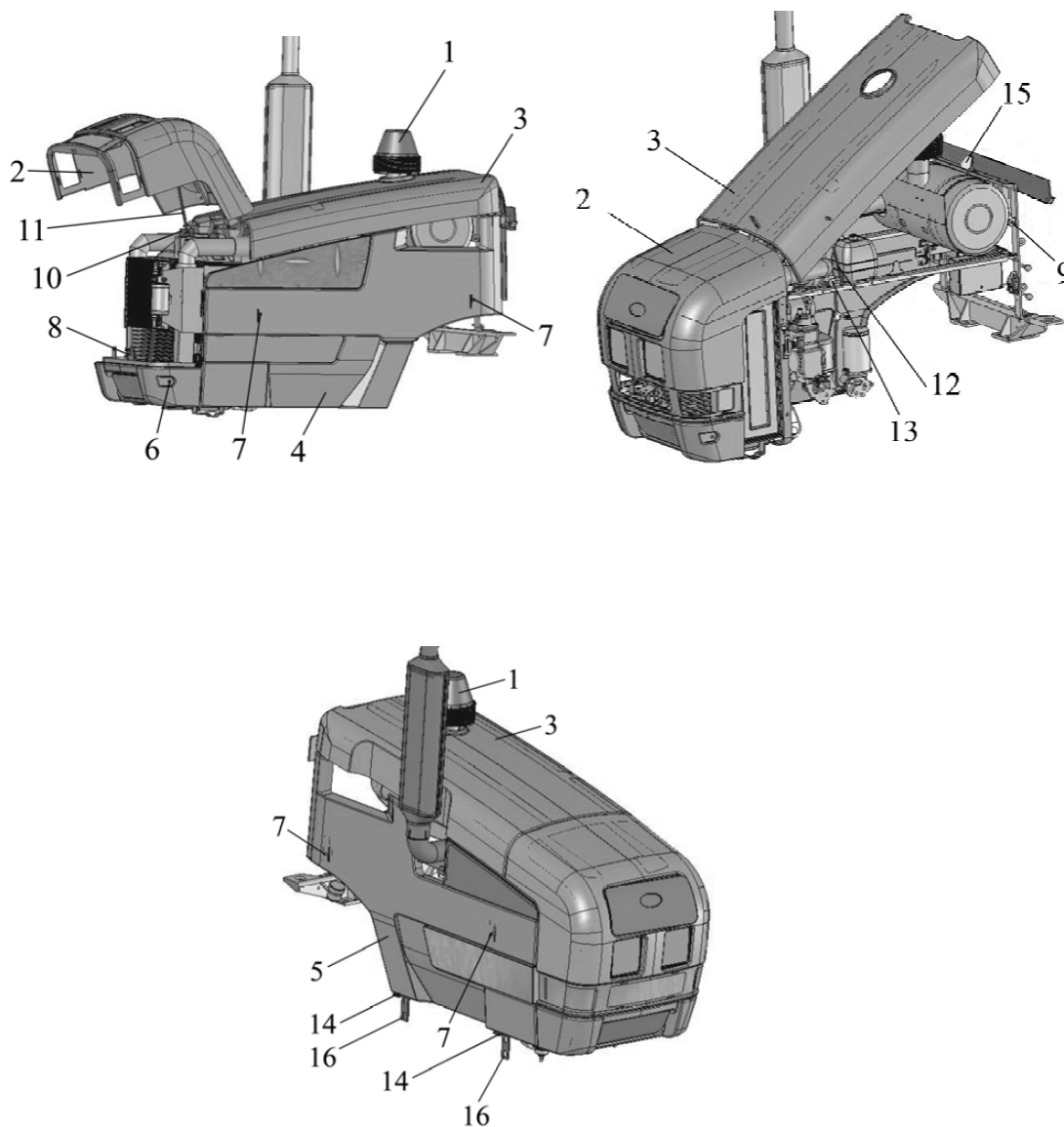
**ATTENTION!:** BEFORE YOU START MAINTENANCE WORKS IN THE AREA UNDER THE MASK, MAKE SURE IT IS SECURELY LOCKED OPEN!

**To install the sides 4 and 5, proceed as follows:**

- install the latches 14 of the sides to the seats on the brackets 16;
- fasten the sides 4, 5 with the locks 7.

**To lower and close the mask 2, proceed as follows:**

- slightly raise the mask 2 to release the arm 11;
- fasten the arm 11 in the clamp on the mask;
- lower the mask 2 to the low position until a distinctive click is heard (the lock 8 engages);



Picture 8.1

1 – monocyclone; 2 – mask; 3 – hood; 4 – left side; 5 – right side; 6 – cable; 7 – lock; 8 – lock; 9 – cable; 10 – bracket; 11 – arm; 12 – arm; 13 – bracket; 14 – latch; 15 – lock.

**ATTENTION!** Prior to performing the works for repairing or servicing the tractor, stop the engine and apply the parking-reserve brake.

If the protective shields were removed for performing the works, make sure that they are refitted in place on finishing the works.

NEVER discharge used oils onto the ground. Use special vessels for collecting and storing them. When changing oil, drain it immediately after running the tractor, while the oil is warm.

For checking oil level, place the tractor on a flat level ground.