

## **OPERATOR'S INSTRUCTION – TIGAR TRACTOR T- 120 SK**

### **GENERAL MAINTENANCE INSTRUCTION NO 24**

Tigar Tractors have been recently introduced in the Organisation and have number of special features. It is, therefore, essential that all operators are thoroughly familiar with the location and use of all controls and instruments on the Tractors before trying to operate it, regardless of previous experience as a Tractor operator. This will ensure minimum breakdown and a long life of the tractors.

This instruction highlights the special precautions, which must be followed by the operators, should be read in conjunction with the operator's instructions issued by the firm.

#### **Special precautions to be followed before starting the engine**

- (a) Check lubrication, cooling water and fuel
- (b) Check that the levers for changing direction of motion and control lever are in neutral position.
- (c) Before operating the tractor allow the engine to warm upto a temp of 60 – 70 °C

#### **Special precautions to be followed after starting the engine**

- (a) While operating the Ignition switch, ensure that the cranking of the engine is not continued for more than 10 – 15 seconds and after the engine has started the bendix drive of the self-starter is disengaged.
- (b) Check lubrication pressure of engine oil. It should be 3.5 Kg/Cm<sup>2</sup> (in normal revolution)
- (c) Check water temp. It should be between 75 – 85 °C
- (d) Watch for abnormal noises.
- (e) Watch colour of exhaust.
- (f) Check leakage of cooling water, lubricating oil & fuel.
- (g) When engine is started, converted oil pressure gauge should indicate oil pressure with 3 – 6 Kg/Cm<sup>2</sup> is not engaged position. When engaged by the control lever the pressure should rise immediately between 12 – 16 Kg/Cm<sup>2</sup>. If oil pressure is below or above this range, stop engine immediately and search for the cause.

- (h) Converter oil thermometer indicates temperature of oil in the Converter which should range from 80 o C to 100 o C. if this exceeds 120 O C , stop the engine and find the cause.

**Special precautions to be followed during driving of Tractor**

- (a) Steering is assisted by Servomechanism. As such the power required to pull the steering control lever is 6 Kg only. Operation of these levers should be done carefully.
- (b) Skid turn should be avoided as far as possible.
- (c) Transmission lever can be shifted to four different position – first speed, second speed, third speed and neutral. Second and third gears speeds are with synchromesh gears and therefore it is possible to shift from 2<sup>nd</sup> to 3<sup>rd</sup> gear and vice versa during the driving but the direction change lever should be disengaged. Transfer from second to first gear speed is possible ONLY when Tractor is stopped and not in motion.
- (d) Avoid sudden application of brakes.
- (e) Direction change lever should be operated without jerks and this should be done after stopping the Tractor.
- (f) While driving down hill
- (i) Never use third gear.
  - (ii) The transmission selection lever should be placed in low speed (preferably first gear)
  - (iii) When turning tractor the foot brake should be used.
  - (iv) Do not switch off the engine.
- (g) When tractor is not being operated the dozer blade should be lowered to the ground.