

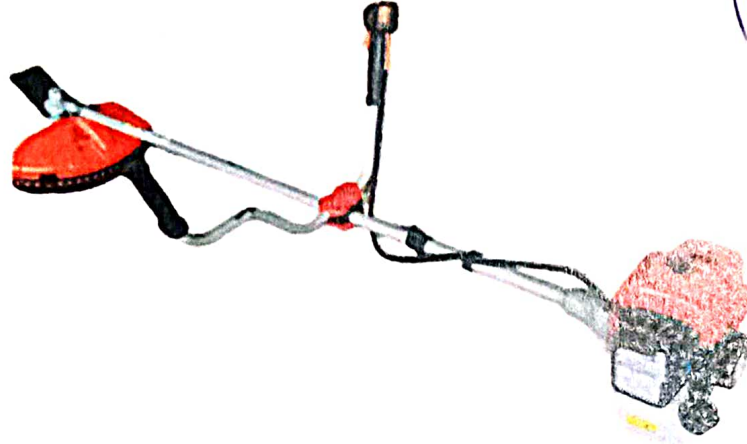
व्यावसायिक परीक्षण रिपोर्ट (प्रारंभिक)  
COMMERCIAL TEST REPORT (Initial)



संख्या/No.: Machine 90/461

माह / Month: March 2023

## INCOMPLETE REPORT



### SSG40-E SS GOLD BRUSH CUTTER



भारत सरकार  
GOVT OF INDIA

कृषि एवं किसान कल्याण मंत्रालय

MINISTRY OF AGRICULTURE & FARMERS WELFARE

कृषि एवं किसान कल्याण विभाग

DEPARTMENT OF AGRICULTURE AND FARMERS WELFARE

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## 1. SCOPE OF TEST

### 1.1 LABORATORY TEST

- Checking of specifications
- Mechanical vibration measurement
- Noise measurement
- Wear assessment of critical components
- Engine performance test

### 1.2 FIELD TEST

- Rate of work
- Quality of work
- Labour requirement
- Adequacy of prime mover power
- Ease of operation, adjustment & safety provisions
- Defects, breakdowns and repairs

## 2. METHOD OF SELECTION

The test sample was selected by the testing authority through random selection. The following test samples were presented by the applicant during the random selection at Applicant's site.

Sr. No.	Serial No. of test sample	Remarks
1	20220526-337	Out of 5 samples Sr. No. 3 sample has been randomly selected.
2	20220526-348	
3	<b>20220526-392</b>	
4	20220526-332	
5	20220526-336	

## 3. TEST CODE AND PROCEDURE

There is no Indian Standard Test Code available for testing of brush cutter as such.

## 4. SPECIFICATIONS

(As per the declaration of the applicant, The specifications were mentioned and details are given below)

### 4.1 General

- Name of the Machine : Brush Cutter
- Name and address of the manufacturer : Taizhou Kewaqi Tools Co. Ltd  
CHINA.
- Name & Address of Applicant : Supreme Sales Agency  
33/1, Netaji Subhas Road,  
Marshal House, Kolkata, West  
Bengal -700001

Make	: SS GOLD
Model	: SSG40-E
Serial No.	: 20220526-392
Type	: Engine operated machine
Type of cutting attachment	: Nylon rope and straight blade
Year of manufacture	: 2022
Country of origin	: CHINA
Type of crops/bush recommended	: Grasses and small shrubs

#### 4.2 Constructional details :

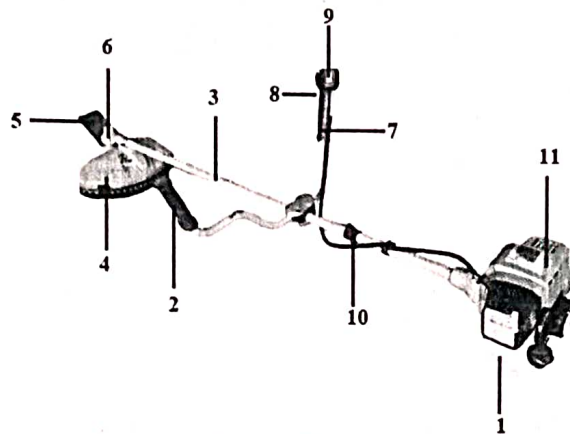


Fig. 1 : SSG40-E SS GOLD BRUSH CUTTER

#### Keywords:

- |                            |                                |
|----------------------------|--------------------------------|
| 1. Fuel tank               | 7. RHS handle                  |
| 2. LHS handle              | 8. Throttle cum clutch trigger |
| 3. Transmission cover pipe | 9. Engine stopping switch      |
| 4. Deflector               | 10. Shoulder strap             |
| 5. Straight blade          | 11. Engine                     |
| 6. Gear case               |                                |

#### 4.3 Details of Prime Mover

Make	: Not Specified
Model	: Not Specified
Type	: Single cylinder, air cooled, vertical, Two stroke, Spark ignition engine
Serial no.	: Not Specified
Year of manufacture	: 2022
Country of origin	: CHINA
Recommended high idle speed (rpm)	: 10000
Recommended low idle speed (rpm)	: 3200
Recommended rated speed (rpm)	: 8500
Engine rated power observed (kW)	: As requested by the applicant, machine was withdrawn from testing & hence engine test could not be conducted.

Cutting attachment: Nylon Rope.

S. No.	Location		Horizontal Direction X( $\mu$ )	Vertical Direction Y( $\mu$ )
1	Steering Handle	RIIS	160*	174*
		LIIS	175*	120*
2	Engine Cover		160*	200*
3	Drive shaft cover pipe		200*	220*

\*The amplitude of mechanical vibration is on higher side.

### 9. FIELD PERFORMANCE TEST

The machine was withdrawn by the applicant from testing after 9.83 hours of field test. The results of incomplete field test are shown in ANNEXURE-I.

#### 9.1 Labour/operator requirement :

It was observed that an averagely built person can able to operate the brush cutter for 40 to 45 minutes at a stretch. Hence, at least minimum two operators are required for continuous operation of the brush cutter.

### 10. EASE OF OPERATION AND ADJUSTMENTS

Field performance test could not be completed due to breakdown of nylon rope attachment (Tap & Go) for three times.

### 11. DEFECTS, BREAKDOWNS AND REPAIRS

It was observed that during 9.83 hours of field testing, three (03) times nylon rope attachment (Tap & Go) assembly was broken. On request of the applicant, two times Tap & Go complete set was changed with new ones during field performance test. However, after third breakdown in Tap & Go assembly, the applicant was withdrawn the machine from testing. Hence field test could not be completed.


### 12. COMMENTS & RECOMMENDATIONS

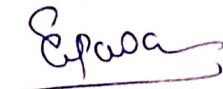
12.1 Due to three times breakdown in nylon rope attachment (Tap & Go), the machine was withdrawn by the applicant from testing. Accordingly, as per request of the applicant as such the incomplete test report has been released.

Machine 90/461	(INCOMPLETE REPORT) SSG40-E SS GOLD BRUSH CUTTER	COMMERCIAL (INITIAL)
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- 12.2 It was observed that during 9.83 hours of field testing, three (03) times breakdown was observed in nylon rope attachment (Tap & Go) assembly. On request of the applicant, two times Tap & Go complete set was changed with new one during field performance test. However, again Tap & Go assembly was broken hence field test could not be completed. This should be looked into for quality improvement.
- 12.3 The engine was not marked with Manufacturer name or trade-mark, Rated power, Rated speed and type of fuel used which does not fulfill the requirement of IS 7347-1974 (Amended 2011). This should be looked into for corrective action.
- 12.4 The amplitude of mechanical vibration at various assemblies viz. steering handle, engine cover and drive shaft cover pipe was on higher side and to the extent of maximum 240 microns. This calls for dampening down of vibration to improve the operational comfort and service life of the components.
- 12.5 Safety wears were not provided with the machine. The applicant is strictly advised to provide the entire safety kit viz. safety shoes, goggles (safety glass), helmet, hand gloves, ear plug, mask, etc. along with each machine for the safety of operator.
- 12.6 **Adequacy of Literature**  
The following literature in English language was provided for reference during testing:  
  - Operator's/ Service manual
  - Parts catalogue
It is recommended to bring out the manual in Hindi and other vernacular languages as per IS: 8132-1999.

**TESTING AUTHORITY**

  
 (M.R. PATIL)  
 AGRICULTURAL ENGINEER

  
 (S.G. PAWAR)  
 AGRICULTURAL ENGINEER

  
 (Dr. P.P. RAO)  
 DIRECTOR