

P125OMA3201



## OPERATION & MAINTENANCE MANUAL

# BD155 BULLDOZER



P125OMA3201



## **OPERATION & MAINTENANCE MANUAL**



# **BD155**

## **BULLDOZER**

**BEML LIMITED**  
INDIA

## QUICK REFERENCE INFORMATION

Machine model & serial no.	Engine model & serial no.	Nearest BEML Office & Telephone no.
<b>BD155</b>  <b>Sl.No.....</b>	<b>BS6D170-1</b>  <b>Sl.No.....</b>	

## PERIODIC SERVICE


ITEM	DATE	SERVICE METER
DELIVERY		
PERIODIC		
PERIODIC		
PERIODIC		
PERIODIC		

## CONSUMABLE PARTS

PARTS NOS.	PARTS NAME	QTY

## FOREWORD

This manual describes procedures for operation, handling, lubrication, maintenance, checking, and adjustment. It will help the operator or anyone realize peak performance through effective, economical and safe machine operation and maintenance.

- Please read this manual carefully BEFORE operating the machine.
- Please continue studying this manual until proper operation is completely reinforced into personal habit.
- This manual describes the basic techniques. Skill is performed as the operator or anyone get the correct knowledge and performance of the machine.
- Operation, inspection, and maintenance should be carefully carried out, and the safety must be given the first priority. Safety precautions are indicated with  marks and technical precautions are indicated with O marks in this manual. The safety information contained in this manual is intended only to supplement safety codes, insurance requirements, local laws, rules and regulations.
- **Some photographs and illustration pictures are different from your machine as technical improvement is continuously reflected on it. Revision to up-to-date manual's content is performed in later editions.**

## BREAKING IN YOUR NEW MACHINE

Each machine is carefully adjusted and tested before shipment. However, a new machine requires careful operation during the first **100** hours to break in the various parts.

If a machine is subjected to unreasonably hard use at the initial operation stage, the potential of performance will prematurely deteriorate and the service life will be reduced. A new machine must be operated with care, particularly with regard to the following items.

- After starting, let the engine idle for **5** minutes to allow proper engine warm-up prior to actual operation.
- Avoid operation with heavy loads or at high speeds.
- Sudden starting or acceleration, unnecessarily abrupt braking and sharp turning should be avoided.
- At the first **250** hours of operation, the machine should be maintained in the following manner in addition to usual **250** hours service:

- ★ Changing all Oils and oil Filters fuel filter elements.
- ★ Checking and adjustment of engine valve Clearances.

For replacement procedure and details, see maintenance table in the maintenance section.

- When replacing oil filter elements (cartridges). Check their interiors for dirt and dust. If heavily collected, check for possible cause before starting operation.
- Hours of operation are indicated by the service meter.

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## SAFETY HINTS

### OPERATION

#### GENERAL

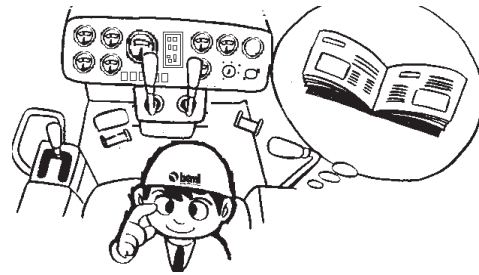


- ★ Wear well-fitting helmet, safety shoes and working clothes. If the nature of the work requires safety, wear protective goggles or mask, thick gloves, earplugs or other protection.
- ★ Accidents or injuries are liable to occur when the operator is careless or slack. It is most important to bear safe operation in mind at all times.
- ★ Take care of your health. Do not drive when tired, or after drinking.
- ★ Learn the prohibitions, cautions and rules about work procedures in the work site.
- ★ When there is a leader, fix standard signals and always follow these signals when operating.



- ★ If there should be an accident or fire or any other such unexpected mishap, deal with it quickly, using the nearest apparatus.
- ★ Learn beforehand the locations of the first aid boxes and fire extinguishers and how to use them. It is also important to know the emergency contact system.
- ★ Learn about the safety devices on your own machine and about how to use them. Confirm that they are correctly attached in the prescribed position.
- ★ Such safety devices include:
  - Guards
  - Canopies
  - Protective Devices

- Roller-Over Protective Structures
- Seat Belts, etc.



- ★ Read the Operation and Maintenance Manual carefully. Learn how to use the control devices, gauges and warning devices. Be sure you understand the meaning of the Caution plates. Remember the checkpoints and checking method for engine oil, fuel, cooling water and hydraulic oil levels.



- ★ Exhaust gas is dangerous. When running the engine for long periods in a poorly ventilated area, there is a danger of gas poisoning, so open the windows or doors to ensure a good supply of fresh air.



- ★ When operating inside a building, always be sure of the clearances of the ceiling, entrances, aisles, etc. and the load limit of the floor.
- ★ Never allow other person than the operator to ride on the machine during operation.



## BEFORE STARTING OPERATION

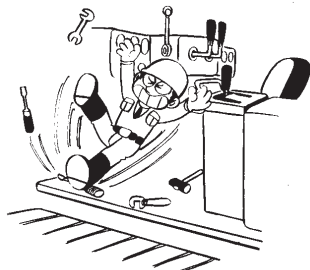
- ★ Examine the lay of the land and the kind of soil at the work site to determine the dangerous points and the best method of operation.

Proceed with the work only after making safety arrangements about the dangerous points.

- ★ Inspect leakages from the fuel, lubricating and hydraulic systems. Check that the shoe bolts are not loose, and that no other parts are damaged or missing. Machines having such failures should not be operated.



- ★ When getting on or off the machine, use the handrail and step provided. Do not jump up or down from the machine.



- ★ Do not leave parts or tools lying around in the vicinity of or on the floor of the operator's compartment. Keep everything in its proper place.
- ★ Wipe off thoroughly any grease, oil or mud on the step, handrail, floor or control levers. Failure to do this may cause you to slip.
- ★ Check the level of the fuel, lubricants and cooling water. Extinguish cigarettes before checking or replenishing. Check that the radiator cap and each oil filler caps or plugs are firmly tightened.
- ★ Adjust the operator's seat until it is in the most comfortable position for operating. Always sit in the seat while operating. Do not operate the machine from any other position.

- ★ Adjust the seat so that the brake pedal can be depressed all the way with the operator's back against the backrest.
- ★ Before operating the machine, check and fasten the seat belt (If equipped).
- ★ Inspect the seat belt and fittings, replace any damaged or worn parts (If equipped).

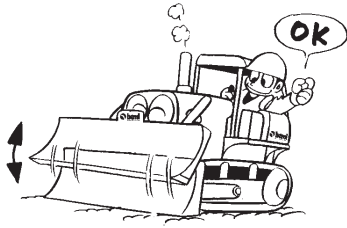


- ★ To ensure the safety of workers near the machine, always sound the horn to warn them before starting the engine and moving the machine. Be particularly careful to check that the rear is clear before backing the machine.
- ★ Inspect the inside of the engine room and remove any dead leaves or paper. Dead leaves or paper are highly inflammable and can cause fires.
- ★ Before starting the engine, confirm that all control levers are in "NEUTRAL" or "HOLD".

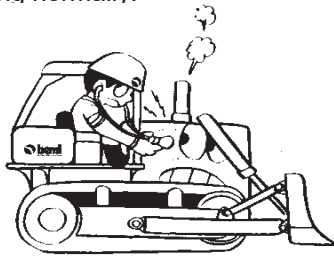
## AFTER STARTING THE ENGINE



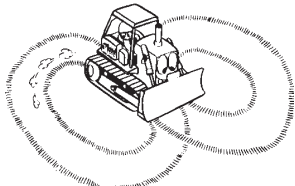
- ★ Confirm that all gauges and warning devices are functioning correctly, and that the gauge readings are within the prescribed range.



- ★ Operate the blade to confirm that it is functioning normally.

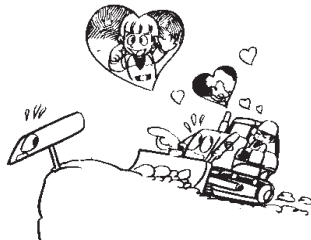


- ★ Move the machine slowly and listen carefully to the engine or gears to confirm that they are not making any unusual noises.
- ★ Operate the gearshift lever to confirm that the travel speeds for forward and reverse are functioning normally. Also carry out a brake test at each travel speed.



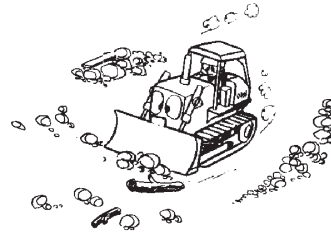
- ★ Choosing a safe place, turn the machine to the left and right to confirm that the steering devices are functioning normally.
- ★ If these tests reveal anything wrong, however slight it may be, contact the man in charge of the machine and operate the machine only after obtaining his permission.

### DURING OPERATION

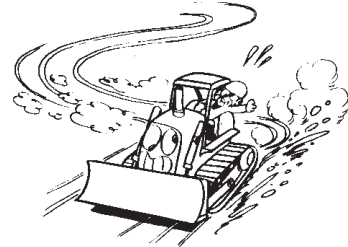


- ★ Always concentrate. It is extremely dangerous to allow yourself to be distracted or to think of other things when operating a machine.

In dangerous places, or where there is restricted visibility, it is important to get down from the machine and confirm whether it is safe before continuing work.



- ★ The work area should be made as flat as possible. If the work area is flat, operation is made much easier and this reduces operator fatigue.



- ★ The machine should always be operated at a speed where it can be correctly controlled. Never do the following:

- ☐ Speeding
- ☐ Sudden starting, sudden breaking, sudden turning.
- ☐ Snaking
- ☐ Coasting



- ★ Be careful of those around you, and always confirm that there is no person or obstacle in the way before driving or turning the machine. Always operate slowly in crowded places. On haul roads or in narrow places, give way to loaded vehicles.

P125PAR3302



## BD155 BULLDOZER

APPLICABLE EQUIPMENT SERIAL NUMBER : P13537 & UP

# PARTS CATALOGUE

**BEML LIMITED  
INDIA**



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NEW FRONTIERS. NEW DREAMS

# PARTS CATALOGUE



# BD155 BULLDOZER

(APPLICABLE EQUIPMENT SERIAL NUMBER : P13537 & UP)

**BEML LIMITED**

INDIA



# FOREWORD

**IN THE PARTS CATALOGUE FEW CODIFICATIONS HAVE BEEN INTRODUCED FOR THE BETTER UNDERSTANDING AND USE, SPECIALLY WITH REGARDS TO THE SERVICEABILITY AND REPLACEMENT OF PARTS:**

**NAME OF PART** : Part name with prefixes, (.), (..), (...) and so on indicate level of assembly.

**QTY** : 'Qty' indicates the quantity of a part required per equipment. In case of a component part of an assembly, however it indicates the quantity of the part required per assembly.

**\*** : Part is not supplied as an independent part, but the assembly containing the part is.

**#** : Item is shown to furnish further details and the same is for reference only. Hence the 'QTY' should not be record.

**\$** : Item is shown for shipping purpose only. These items are to be removed while assembling.

**R** : Items marked thus are required only when ripper is fitted.

**Note** : 1) This is applicable when the equipment is fitted with BS6D170-1 engine, standard arm chair steering, pilot hydraulics, mechanical transmission.

2) For details of kit items K1, K2, K3 etc., indicated in the remarks column, refer chapter service kit.





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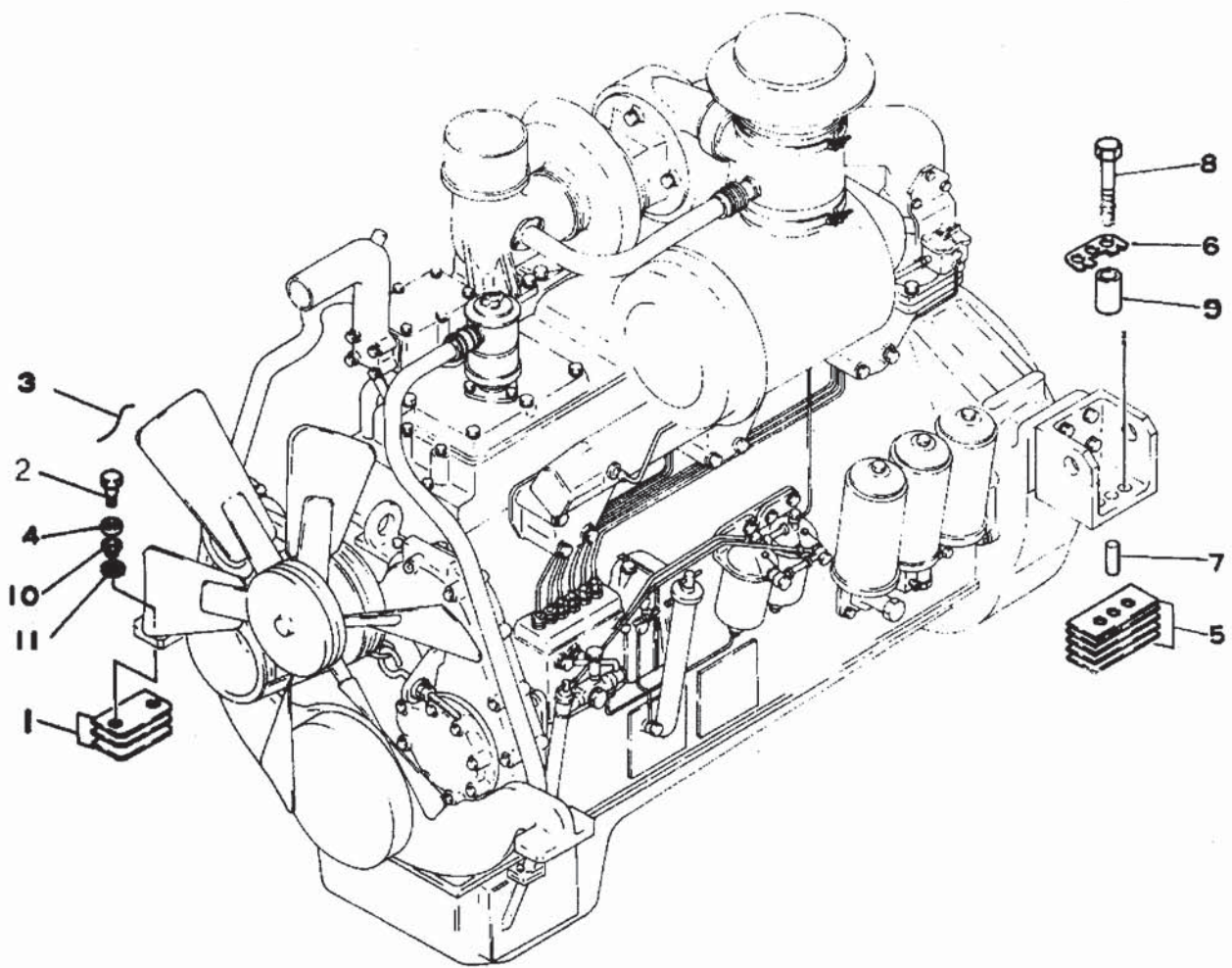
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**I. ENGINE RELATED PARTS  
AND  
ELECTRICAL SYSTEM**

FIG 1000 ENGINE MOUNT

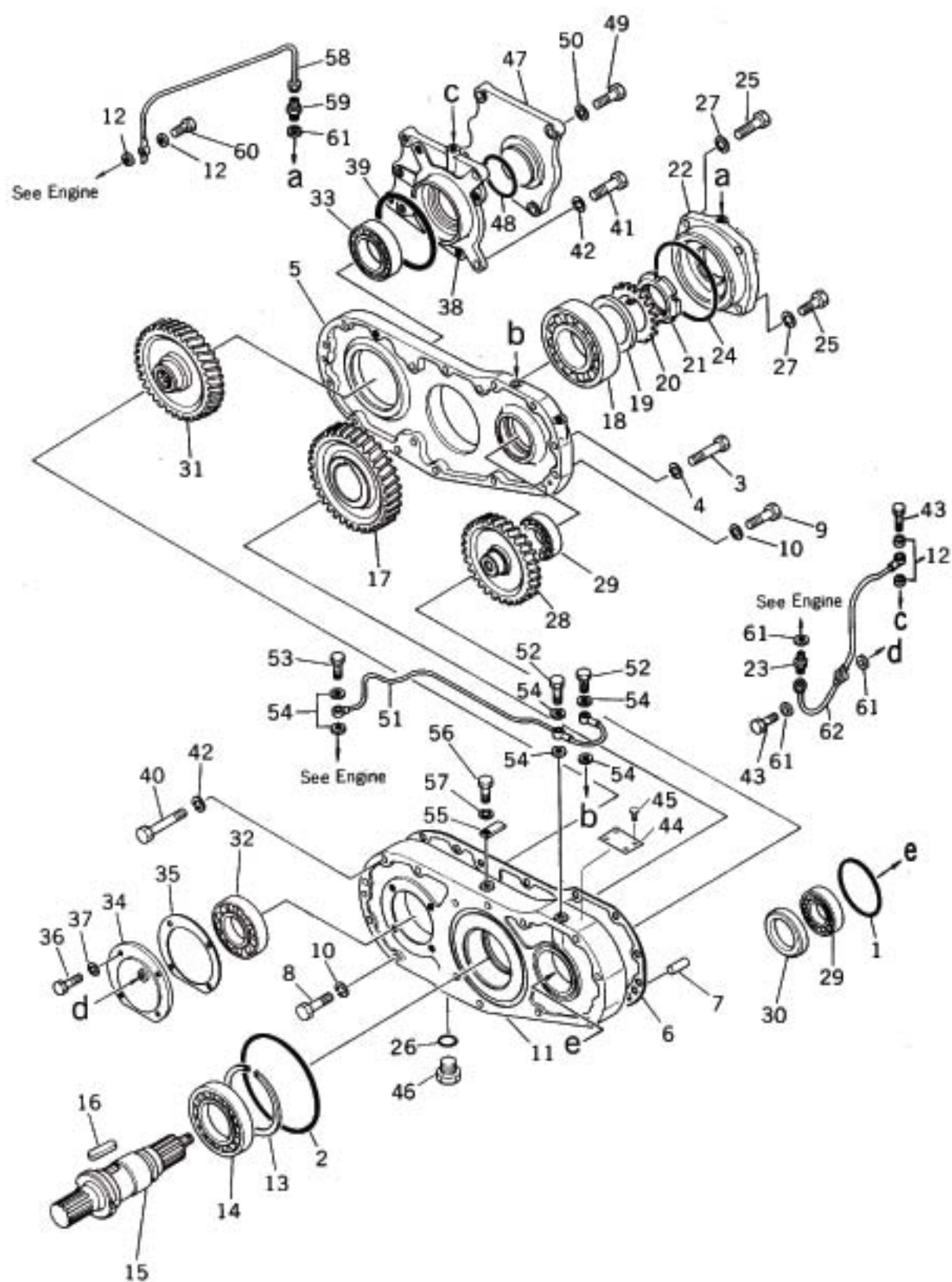


## ENGINE MOUNT

FIG NO.1000

ITEM	PART NUMBER	NAME OF PART	QTY	REMARKS
1	125 EI 00121	FRONT SHIM ASSY	2	
	*125 EI 11098	. SHIM 1.0MM	3	
	*125 EI 11105	. SHIM 0.5MM	1	
	*125 EI 11113	. SHIM 0.2MM	2	
2	125 EI 11057	BOLT	4	
3	130 EI 11006	WIRE LOCK	2	
4	125 EI 11073	SEAT FRONT	4	
5	125 EI 00138	REAR SHIM ASSY	2	
	*125 EI 11016	. SHIM 1.0MM	3	
	*125 EI 11024	. SHIM 0.5MM	1	
	*125 EI 11032	. SHIM 0.2MM	2	
6	125 EI 11049	WASHER LOCK	2	
7	125 EI 11008	PIN DOWEL	2	
8	CFB08 22210	BOLT	4	
9	125 EI 11121	SPACER	4	
10	125 EI 61067	BUSHING RUBBER	4	
11	125 EI 11081	BUSHING FRONT	4	

FIG 1011 POWER TAKE OFF





## POWER TAKE OFF

FIG NO.1011

ITEM	PART NUMBER	NAME OF PART	QTY	REMARKS
	820 PO 01008	POWER TAKE OFF ASSY	1	
1	CHS01 12105	.O RING	1	
2	CHS01 15195	.O RING	1	
3	CFB02 21205	.BOLT	10	
4	CFW01 11236	.WASHER SPRING	10	
5	125 PO 41355	.CASE	1	
6	125 PO 71163	.GASKET CASE	1	
7	CFP04 01024	.PIN DOWEL	2	
8	CFB01 21275	.BOLT	2	
9	CFB01 21250	.BOLT	2	
10	CFW01 11236	.WASHER SPRING	4	
11	125 PO 41388	.CASE	1	
12	CPF06 01012	.WASHER SEAL	4	
13	125 PO 91154	.RING SNAP	1	
14	125 PO 91235	.BEARING	1	
15	820 PO 51001	.SHAFT	1	
16	CFK01 20050	.KEY	2	
17	125 PO 51189	.GEAR	1	
18	CBB40 06314	.BEARING	1	
19	125 PO 11199	.COLLAR	1	
20	CFW21 16823	.WASHER LOCK	1	
21	CFN40 16814	.NUT	1	
22	820 PO 11011	.COVER	1	
23	CPF04 10610	.NIPPLE	1	
24	CHS01 15150	.O RING	1	
25	CFS01 31230	.SCREW	4	
26	CHS03 12434	.O RING	1	
27	CFW01 11236	.WASHER SPRING	4	
28	125 PO 51245	.GEAR	1	
29	CBB40 06209	.BEARING	2	
30	125 PO 11255	.RING	1	
31	125 PO 51367	.GEAR	1	
32	CBB40 06212	.BEARING	1	
33	CBB40 06312	.BEARING	1	
34	125 PO 41266	.COVER	1	
35	125 PO 71277	.GASKET	1	
36	CFS01 31025	.SCREW	4	
37	CFW01 11030	.WASHER SPRING	4	
38	125 PO 31376	.CAGE	1	
39	CHS01 15150	.O RING	1	
40	CFB02 21205	.BOLT	3	

# SHOP MANUAL

P125SH03300



## BD155 BULLDOZER



P125SHO3300



# **BD155**

## **BULLDOZER**

## **SHOP MANUAL**

**BEML LIMITED**

**INDIA**





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## **IMPORTANT SAFETY NOTICE**

Proper service and repair is extremely important for the safe operation of machine. The service and repair techniques recommended by **BEML** and described in this manual are both effective and safe methods of operation. Some of these operations require the use of tools specially designed by **BEML** for the purpose.

To prevent injury to workers, the symbols  and  are used to mark safety precautions in this manual. The cautions accompanying these symbols should always be followed carefully. If any dangerous situation arises or may possibly arise, first consider safety, and take the necessary actions to deal with the situation.

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## FOREWORD

This shop manual has been prepared as an aid in improving the quality of repairs by giving the serviceman an accurate understanding of the product and by showing him the correct way to perform repairs and make judgements. Make sure you understand the contents of this manual and use it to full effect at every available opportunity.

### Organization

This shop manual mainly contains the necessary technical information for operations performed in a service workshop.

For ease of understanding, the manual is divided into chapters for each main group of components, these chapters are further divided into the following sections.

#### **Structure and function**

This section explains the structure and function of each component. It serves not only to give an understanding of the structure, but also serves as reference material for troubleshooting.

#### **Testing and adjusting**

This section explains checks to be made before and after performing repairs, as well as adjustments to be made at completion of the checks and repairs.

Troubleshooting charts correlating "Diagnoses" to "Causes" are also included in this section.

#### **Disassembly and assembly**

This section explains the order to be followed when removing, installing, disassembling or assembling each component, as well as precautions to be taken for these operations.

#### **Maintenance standard**

This section gives the judgement standards when inspecting disassembled parts.

**For details of the engine, refer to the shop manual of BS6D170-1**



## USING THE SHOP MANUAL

### Volumes

Shop manuals are issued for carrying out repairs.

They are divided as follows:

Chassis volume:	issued for every machine model
Engine volume:	issued for each engine series
Electrical volume :	each issued as one volume to cover all models
Fuel system volume :	
Attachments volume :	

In addition, the following volumes are issued for high level rebuilding techniques to cover all models.

Engine volume

Undercarriage volume

The following volumes are issued for inspection and tests after repairs:

Guidance for reusable parts volume

Bench test methods volume

These various volumes are designed to avoid duplicating the same information. Therefore to deal with all repairs for any model, it is necessary to have the shop manual for that model as well as the relevant engine volume, the fuel system volume and the electrical volume.

This shop manual is **chassis volume**.

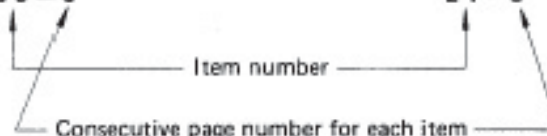
### Distribution and Updating

Recipients of shop manuals are recorded at the **BEML** Head Office. Any additions, amendments or other changes will be sent to all recipients without fail, so someone should be appointed to be in charge of manuals. In this way, pages can be added or removed immediately and the manuals kept up to date and easy to use.

- 1) File under the manual title file printed on the bottom of the page.
- 2) Method of taking out the pages for filing is as follows: First order each item number starting with the lowest, and next order according to the consecutive page number for each item.

Example: 00 — 6

21-3



- 3) Additional pages: Additional pages are indicated by a dash (–) and number after the page number. File as in the example.

**Example: 21 – 4**

$$\begin{array}{l} 21 - 4 - 1 \\ 21 - 4 - 2 \\ 21 - 5 \end{array}$$

Pages added between 21 – 4 and 21 – 5

Besides this, when necessary, information will be written in the filing ring hole's margin. Look when filing.

Revised Edition  
Mark





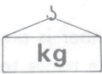




When a manual is revised, a revision number is placed within a circle and printed on the bottom inside corner of the pages to distinguish it from the old manual. Therefore, higher circled numbers supersede lower ones.

### Revisions

A table listing revisions and revised pages to the present is printed on the back of the title page, so when there is a revision, revise the title page also, and use it to keep the file in order.

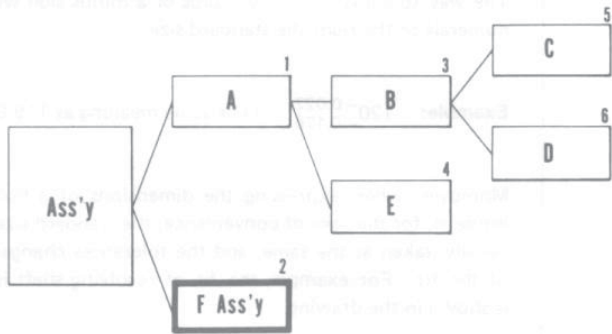
## Symbols

So that the shop manual can be of sufficient practical use, we have marked important places for safety and quality with the following symbols.

SYMBOL	ITEM	REMARKS
	Security	This indicates work that requires special precautions for the security of the machine when assembling.
	Safety	Special safety precautions are necessary when performing the work.
		Extra special safety precautions are necessary when performing the work because it is under internal pressure.
	Caution	Special technical precautions or other precautions for preserving standards are necessary when performing the work.
	Weight	Weight of parts or systems. Caution necessary when selecting hoisting wire, or when working posture is important, etc.
	Tightening torque	Places that require special care with the tightening torque when assembling.
	Coat	Places to be coated with adhesives, etc. when assembling.
	Oil, water	Places for filling with oil, etc. Oil capacity.
	Drain	Places for draining oil, etc. Quantity to be drained.

Network Diagrams

The standard procedures for disassembly and assembly are described and shown in photographs for each part of the machine.  
The sequence or steps employed in disassembly and assembly are shown in network diagrams as depicted below.



The sequence of the procedural steps is given in arabic numbers on the top right of each block. For example, when it is necessary to remove part D from the assembly, the steps for removal should be A → B → D. Or, to remove part E the step is A → E. **F Ass'y** is an assembly for which the disassembling procedure is described separately. For assembly, the sequence is presented under each section, in the same manner as for disassembly.

Troubleshooting Chart

As shown below, the symptoms relating to a particular trouble are described in the line designated "Diagnoses". The cause of the trouble is then correlated under the "Causes" column and is shown marked.

Problem No. 1 Reduced tractive power or slow travel speed.

Diagnoses	Causes		
	Oil leaks in torque converter	Air suction in the hydraulic pump	
Torque converter oil pressure gauge shows lower than normal pressure, (normal 3 ~ 4.8 kg/cm <sup>2</sup> )	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Transmission oil pressure gauge shows lower than normal pressure, (normal 20 ~ 23 kg/cm <sup>2</sup> )		<input type="radio"/>	
	<input type="radio"/>		

## DEFINITION

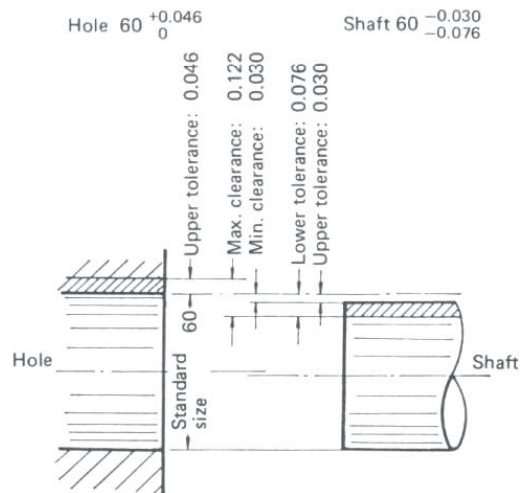
Standard Size,  
Tolerance

The dimensions of finished parts each differ a little. Therefore, when determining the finished dimensions of parts, a dimension that will be standard is determined provisionally, and then the difference allowed from it is indicated. The former is called the **standard size**, and the latter the **tolerance**.

The way to show this is by a plus or a minus sign with the tolerance in smaller numerals to the right the standard size.

**Example:**  $120 \begin{smallmatrix} -0.022 \\ -0.126 \end{smallmatrix}$  (The same meaning as  $119.874 - 119.978$ )

Moreover, when expressing the dimensions of a hole and the shaft that goes inside it, for the sake of convenience, the standard size for the hole and the shaft usually taken as the same, and the tolerances changed to indicate the tightness of the fit. For example, the fit of revolving shaft is indicated as follows, and is shown in the drawing.



**Standard Size** This is the standard value at the time of design, the finished dimension of new parts.

**Repair Limit** This is the limit in dimension up to which the part can be used. (The size of parts changes due to wear or distortion during use). When parts exceed the repair limit, they must be repaired or replaced as specified.

**Standard Clearance** This is the clearance between two new parts after assembly, shown as a range between minimum clearance and maximum clearance. In general, parts are adjusted to this clearance after repair.

**Clearance Limit** This is the maximum clearance allowed between parts. (The clearance increases due to wear, etc. during use.)  
When the clearance exceeds the clearance limit, the parts must be repaired or replaced as specified.

**Maintenance Standard** This is the number given to items in diagrams of individual components. The same number is given in the left hand column for ease of identification.



					Unit: mm
No.	Check item	Criteria			Remedy
1		Serial No.	Standard size	Repair limit	

Unit: mm								
No.	Check item	Criteria						Remedy
10		Serial No.	Standard size	Tolerance		Standard clearance	Clearance limit	
				Shaft	Hole			

# TORQUE SPECIFICATIONS FOR NUTS AND BOLTS

Nuts and Bolts should be tightened to torque values shown below.

Unit : kg.m

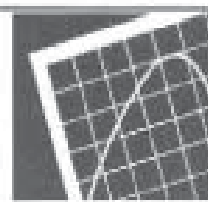
Nominal Bolt Dia. (mm)	Width across flats (mm)		
		Desired value	Allowable range
6	10	1.35	1.2~1.5
8	13	3.2	2.8~3.5
10	17	6.7	6~7.5
12	19	11.5	10~12.5
14	22	18	16~20.0
16	24	28.5	25~31.5
18	27	39	35~43.5
20	30	56	50~62.0
22	32	76	67.5~84.5
24	36	94.5	84~105
27	41	135	120~150
30	46	175	155~195
33	50	225	200~250
36	55	280	250~310
39	60	335	295~370

The above table indicates the cases where a torque wrench is employed.





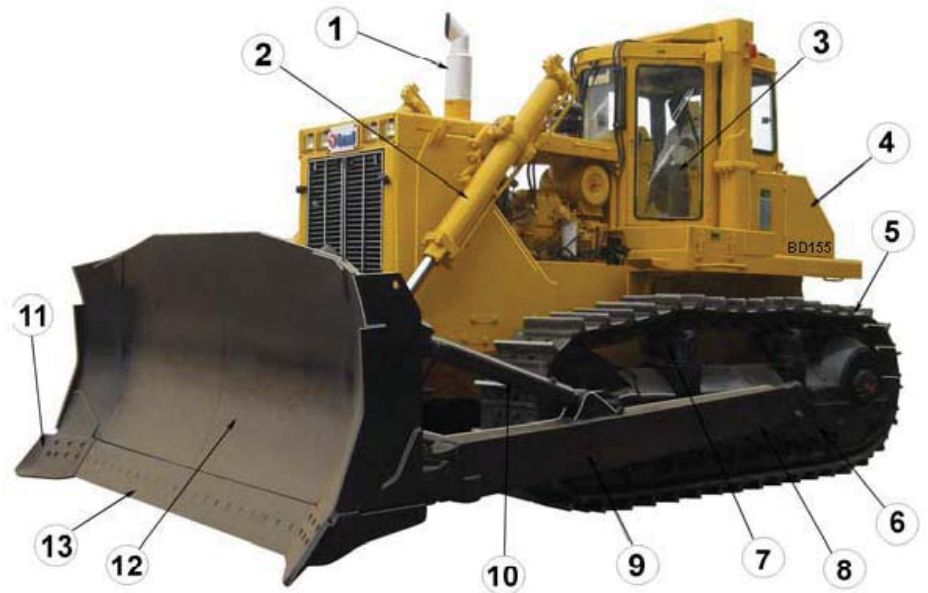
# 01 GENERAL



General View	01-02
Dimensional details with various views	01-03
Specification	01-04
Engine view	01-05
Engine specification	01-06
Performance curve	01-07
Weight table	01-08
Location of Serial No.	01-11
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## GENERAL VIEWS

- |                        |                       |                  |
|------------------------|-----------------------|------------------|
| 1. Exhaust pipe        | 6. Track frame        | 11. End bit      |
| 2. Blade lift cylinder | 7. Carrier roller     | 12. Blade        |
| 3. Operator's seat     | 8. Track roller guard | 13. Cutting edge |
| 4. Fuel tank           | 9. Straight frame     |                  |
| 5. Track shoe          | 10. Brace             |                  |



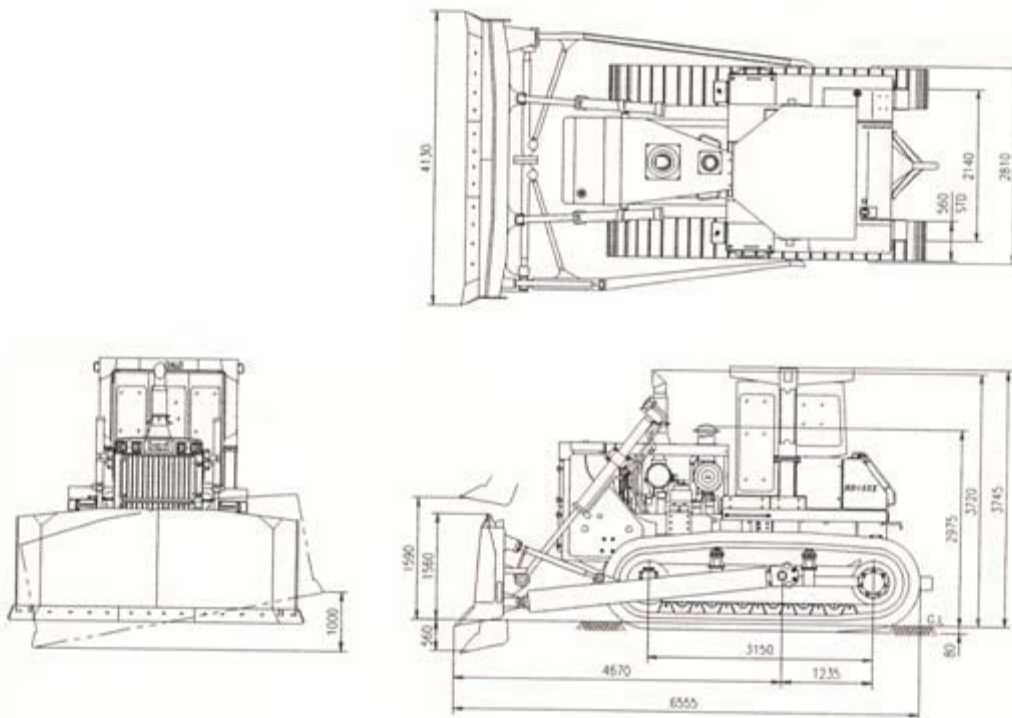
## OPERATOR'S COMPARTMENT

1. Fuel control lever
2. Gear shift lever
3. Gear shift lever safety lock
4. Steering lever (LH)
5. Steering lever (RH)
6. Brake pedal
7. Brake lock lever
8. Decelerator pedal
9. Horn button
10. Safety lock  
(for blade operation)
11. View of dashboard



## GENERAL ASSEMBLY DRAWING

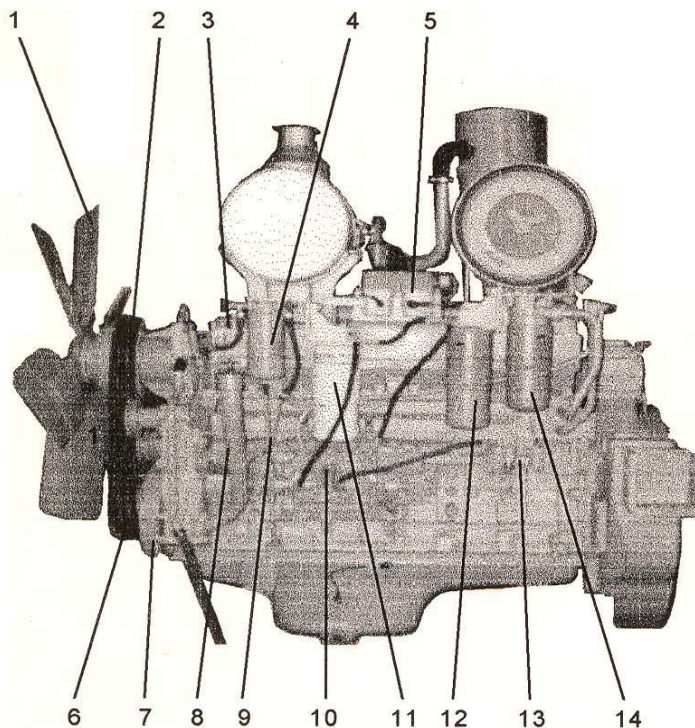
## BD155 STRAIGHT - TILT DOZER



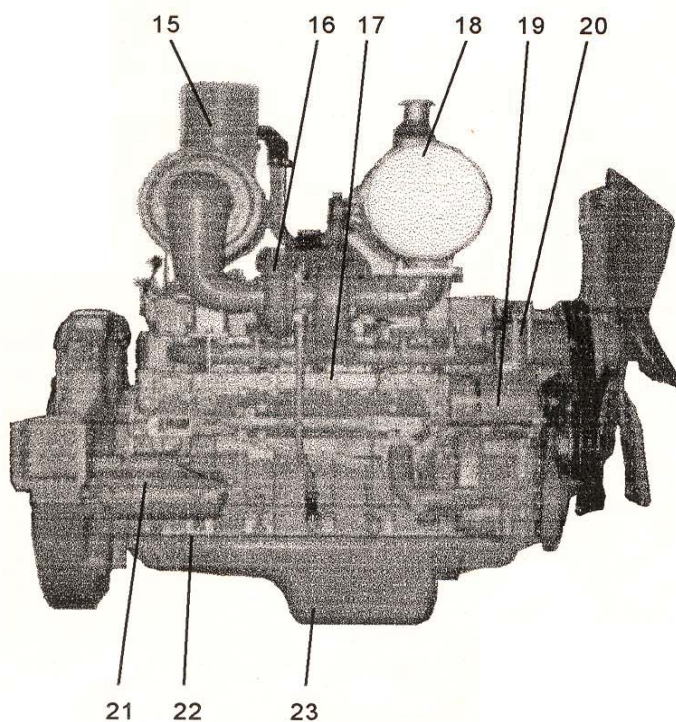
## SPECIFICATIONS

Weight	Operating weight				
	Tractor			(kg)	29480
	With Straight Tilt Blade			(kg)	36020
Performance	Minimum turning radius			(m)	3.8
	Gradeability			(degree)	30
	Stability			(degree)	35
	Travel speed	Forward	1 <sup>st</sup>	(km/h)	0~3.7
			2 <sup>nd</sup>	(km/h)	0~6.8
			3 <sup>rd</sup>	(km/h)	0~11.8
		Reverse	1 <sup>st</sup>	(km/h)	0~4.5
			2 <sup>nd</sup>	(km/h)	0~8.2
			3 <sup>rd</sup>	(km/h)	0~13.7
Dimensions	Overall length Tractor			(mm)	5095
	With Straight Tilt Blade			(mm)	6555
	Overall width Tractor			(mm)	2810
	With Straight Tilt Blade			(mm)	4130

## GENERAL VIEWS OF BS6D170-1 ENGINE



1. Fan
2. Fan pulley
3. Breather
4. Corrosion resistor
5. Electrical intake air heater
6. Crankshaft pulley
7. Vibration damper
8. Oil filler tube
9. Dipstick
10. Fuel injection pump
11. Pre filter
12. Fuel filter
13. Water separator
14. Oil filter



15. Air cleaner
16. Turbocharger
17. Oil cooler
18. Muffler
19. Alternator
20. Thermostat housing
21. Starting motor
22. Under frame
23. Oil pan

## ENGINE SPECIFICATIONS

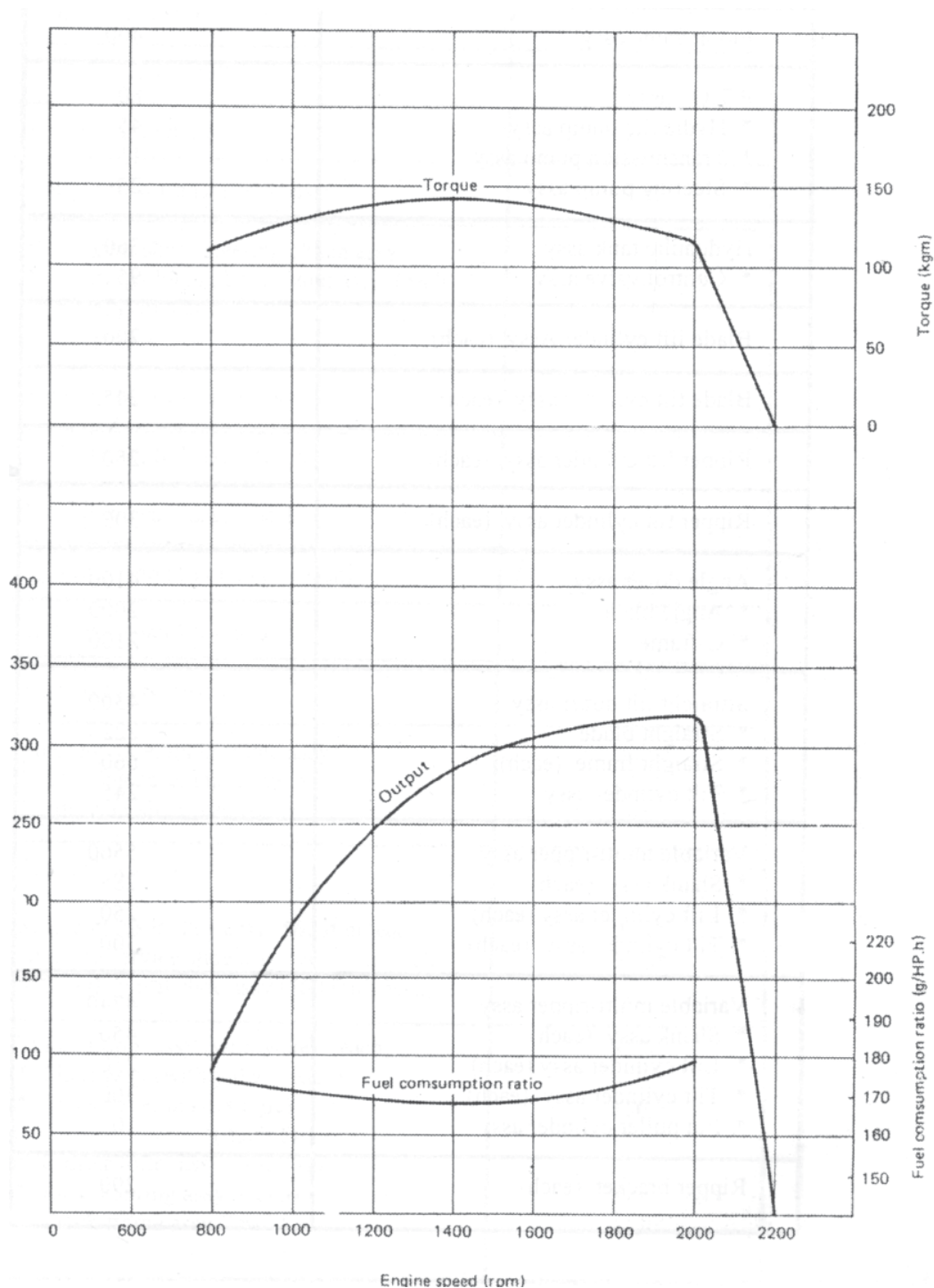
Number of Cylinders – Bore x Stroke	mm	6 – 170x170
Total piston displacement	cc	23150
Firing order		1 – 5 – 3 – 6 – 2 – 4
Dimensions		
Overall length	mm	1873
Overall width	mm	1265
Overall height (Excluding exhaust pipe)	mm	1922
Performance		
Flywheel horsepower	HP/rpm	324/2000
Maximum torque	kgm/rpm	148.5/1400
High idling	rpm	2200±50
Low idling	rpm	650
Minimum fuel consumption ratio	g/kW.h	168
Dry weight	kg	2700
Fuel pump		Bosh Pe-Pd type
Governor		Bosh RSUV centrifugal all-speed type
Lubricating oil amount (refill capacity)		58 (43)
Coolant amount		180
Alternator		24V, 100A/140A
Starting motor		24V, 9.0KW x 1
Battery		12V, 200Ah x 2
Turbocharger		Refer Engine Shop manual



## PERFORMANCE CURVE

### BS6D170-1 ENGINE PERFORMANCE GRAPH FOR BD155 APPLICATION

Rated power : 242kW(324HP) @2000 rpm  
Maximum Torque : 1456 N-m (148.5 kgm)@1400 rpm  
Minimum Fuel Consumption Ratio : 201g/kW-hr



## WEIGHT TABLE

(Unit: kg)

Model	BD155	Remarks
Applicable number		
Engine Torque converter assembly	3,400	Including engine(2700), PTO and torque converter(245)
Torque converter assembly	245	Single unit of torque converter assembly
Radiator guard, blade cylinder assembly		Including radiator guard, radiator assembly and blade cylinders(right and left)
Radiator guard		Including grill
Radiator assembly	435	Single unit of radiator assembly
Universal joint assembly	20	
Transmission assembly (POWERSHIFT)	900	Single unit of transmission with valves
Transmission valve assembly		Single unit of transmission valve assembly
Steering clutch: brake band assembly	160	A unit of one side assembly to be lifted with a band, removing mounting bolts for clutch and brake drums.
Bevel gear shaft	35	
Bevel gear	40	
Sprocket assembly	310	Assembly consisting of segment boss and teeth
Final drive case	185	Single unit on one side
Main frame assembly	3000	Assembly consisting of main frame, bevel gear shaft case and sprocket shafts on RH and LH.
Main frame -Bevel gear shaft case	2700	
Sprocket shaft	145	Single unit on one side
Track assembly		
Single grouser shoe assembly	2290	Single unit on one side (560 mm in width)
Scoria disposal shoe assembly	2545	Single unit on one side (560 mm in width)
Reinforced single grouser shoe assembly	2520	Single unit on one side (560 mm in width)



## WEIGHT TABLE

(Unit: kg)

Model	BD155	Remarks
Applicable number		
Track group	3580	A track group assembly on one side, detached from diagonal brace cap and sprocket shaft bracket.
Idler assembly	450	A single unit on one side, including yoke
Track roller (S) assembly	130	Single flange roller assembly
Track roller (D) assembly	140	Double flange roller assembly
Carrier roller assembly	65	A single unit of assembly
Recoil spring assembly	285	A single unit of assembly on one side
Track frame	1330	A single unit of recoil frame assembly on one side
Equalizer bar	340	A single unit of equalizer bar
P.T.O assembly	160	Assembly including each pump
Work equipment pump assembly	45	A single unit of pump
Transmission pump assembly	15	A single unit of pump
Steering pump assembly	25	A single unit of pump
Pilot pump	10	A single unit of pump
Engine under guard	300	
Transmission under guard	65+119	2 pieces
Brake covering assembly	75	One side
Steering control valve assembly	12	
Floor frame assembly	210	
Hydraulic tank assembly	190	
Work equipment control valve assembly	60	
Fuel tank assembly	305	

## WEIGHT TABLE

(Unit: kg)

Model	BD155	Remarks
Applicable number		
Blade lift cylinder assembly	200	One side only
Angle blade assembly	5770	The assembly removed from cylinder rods and trunnion caps
Straight tilt dozer assembly	5780	
Semi-U blade assembly	5930	
Angle blade	2000	A single unit of blade
Straight blade	2220	
Semi-U blade	2370	
C-Frame assembly	2100	A single unit of frame
Straight frame	660	
Tilt cylinder assembly	245	