PDCR88 Road Roller Owner's Manual



SAVE THIS MANUAL FOR FUTURE REFERENCE

This manual provides information regarding the operation and maintenance of these products. We have made every effort to ensure the accuracy of the information in this manual. We reserve the right to change this product at any time without prior notice.

Please keep this manual available to all users during the entire life of the Road Roller.

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I. SAFETY INSTRUCTION

- 1.1 PLEASE READ AND UNDERSTAND THIS MANUAL COMPLETELY, AND BE TRAINED BY THE PROFESSIONAL BERORE OPERATING THE MATCHINE
- 1.2 **WARNING:** IT .MEANS THE WRONG OPERATIONS THAT MAY INDUCE CASUALTY AND BE ABSOLUELY FORBIDDEN.

CAUTION: IT MEANS THE RIGHT OPERATION.CONTRAVENTION TO IT MAY CAUSE.THE SET OR SPARE PARTS DAMAGED

2. SAFETY DETAILS

2.1 WARNING!!!

.NEVER OPERATING THE MACHING OUTSIDE THE USING AREA .OPERATING THE MACHINE IN FLAMMABLE ENVIRONMENT IS FORBIDDEN.

.PLEASE CHECK THE MACHINE CAREFULLY (BASED ON THE 3RD SECTION) TO AVOID THE ACCIDENT OR ACCESSORY DAMAGE BEFORING OPERATING.

.NEVER OPERATE THE ENGINE IN A CLOSED AREA OR IT MAY CAUSE UNCONSCIOUSNESS AND DEATH WIIHIN A SHORT TIME. OPERATE THE MACHINE IN A WELL-VENTILATED AREA.

.WARNING SYMBOL SHOULD BE SHOWED BESIDES THE OPERATING AREA.IRRELEVANT PERSON, ESPECIALLY FOR CHILDREN ARE FORBIDDEN TO ENTER WITHIN 2M OF THE WORKING AREA STOP OPERATING IMMEDIATELY WHEY COME CLOSE/TO AVOID INJURY.

.NEVER OPERATING THE MACHINE WHERE NECESSORY SAFETY EQUIPMENTS ARE ABSENT, OR THE MACHINE IS NOT MOUNTED IN THE RIGHT OPERATING AREA.

.MAKE SURE TO OPERATING ON A BALANCE SURFACE, DO NOT SLANT BEYOND 30 DEGREE. WHEN USING THE MACHINE. IF NOT. THE FUEL MAY OVERFLOW

.THE OPERATOR CAN NOT GO AWAY WHEN THE MACHINE IS RUNNING.WHILF KEEPING A SAFETY DISTANCE IS NECESSORY.

.WEARING EXPOSURE SUIT.EREPATCH.AND PROTECTING SHOES IS REQUIRED WHEN OPERATING THE MACHINE

2.2 WARNING!!!(ENGINE USING)

OPERATING OR REPLACING FUEL OF ENCINE IS VERY DANGEROUS, PLEASE OBEY TO THE ENGINE INSTRUCTION MANUAL(INSTRUCTION

MAUNAL IS OFFERED BY ENGINE MANUFACTURER) STRICTLY WHEN USING, IF NOT, CASUALTY MAY OCCUR.

NEVER OPERATING THE ENGINE IN A FLAMMABLE ENVIRONMENT, ESPECIALLY DO NOT REPLACING FUEL FOR THE ENGINE IN SUCH OCCASION

.REFILL FOR THE FUEL TANK IN A WELL VENTILATED AREA.SCREW THE TANK CAP AFTER REFILLNG; CHECK WHETHER IT LEAK OR NOT BEFORE USING; STOPPING FOR OPERATING THE MACHINE IF TANK LEAKS.

.DO NOT REFILL TANK WHILE ENGINE IS RUNNING OR HOT; CLOSE FUEL COCK BEFORE REFUELING WITH FUEL; BE CAREFUL NOT TO ADMIT DUST, DIRT, WATER OR OTHER FOREIGN INTO FUEL, WIPE OFF SPILT THOROUGHLY BEFORE STARTING ENGINE.

KEEP THE FUEL TANK EMPTY WHEN NOT USING THE MACHINE.

.NEVER OPERATE WITHOUT AIR FILTER.

.DO NOT TOUCH ANY PARTS OF THE ENGINE WHEN IT IS WORKING OR WITHIN SHORT TIME AFTER IT STOPS, FOR THE TEMPERATURE OF THESE PARTS ARE VERY HIGH WHEN IT WORKS. STORAGE AND TRASPORTATION AFTER IS COOLED IS ACCEPTABLE.

2.3 MAINTENANCE AND REPAIRING

.DO NOT JUGGLE THE PARAMETERS.

.MAINTAIN AND REPAIR THE MACHINE ACCORDING TO THE OWNER'S MANUAL.

.UNLOADING SPARK PLUG COVER WHEN MAINTAIN OR REPAIR MACHINE.

OFTEN CLEAN AIR FILTER AND RADIATOR.

.USING THE SPARE PARTS RECOMMENDED BY US.

II. Application

Light road roller, which is simple and convenient to operate, often uses for pressing sand, earth asphalt surface with high effect. It is also highly active in the maintenance and repairing of road, pavement, bridge and parking lot. Forward and backward mechanical drive is apply to kinds of working occasions and is very easy to operate.

III. Operating principle

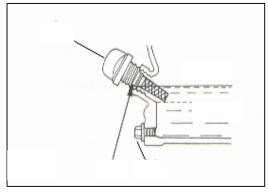
(1) forward and backward :from engine → gear case → perform clutch → chain → idler wheel

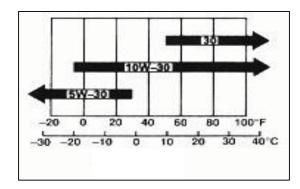
(2) vibratory : from engine → gear case → centrifugal clutch → belt → idler wheel (exciting force produced by hollow swage)

IV. CHECK BEFORE START

1. OIL CHECK

1.1 REMOVE OIL FILLER CAP AND CHECK THE ENGINE OIL LEVEL.IF OIL LEVEL IS BELOW THE LOWER LEVEL LINE, REFILL WITH SUITABLE OIL TO UPPER LEVEL LINE.DO NOT SCREW FILLER





OIL CAPACITY----0.4L

1.2 RECOMMENDED ENGINE OIL;

SAE10W-30

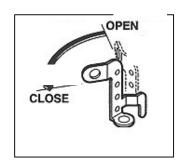
CAUTION: CHOOSING THE OIL WITHOUT CLEANER OR 2 STROKE TYPE CAN SHORTEN THE LIFE SPAN OF THE ENGINE.

- 2. MAINTAINING AN AIR CLEANER IN PROPER CONDITION IS VERY IMPORTANT. DIRT INDUCED THROUGH IMPROPERLY INSTALLED, IMPROPERLY SERVICED, OR INADEQUATE ELEMENTS DAMAGES AND WEARS OUT ENGINES, KEEP THE ELEMENT ALWAYS CLEAN.
- 3. CHECK EACH BOLTS OF THE MACHINE, AND MAKE SURE THEY ARE TIGHT
- 4. MAKE SURE WHETHER THERE IS FUEL IN THE FUEL TANK OR NOT. RECOMMEND FUEL---OVER 90# UNLEADED FUEL OIL AND FUEL MIXER IS NOT ACCEPTABLE.KEEP THE FUEL TANK CLEAN.

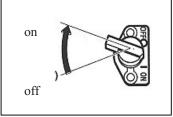
V.OPERATION

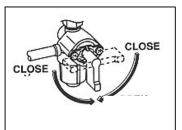
1. POWER ON

1.1 TURN THE ENGINE SWITCH TO "ON"



- 1.2 SCREW THE FUEL VALVE TO "ON"
 1.3 PUSH THE CHOKE VALVE LEVER TO "ON"
- 1.4 PUSH THE THROTTLE LEVER
 ONE OR TWO STEP RIGHTWARD.
 1.5 PULL THE HANDLE UNTIL FEELING
 RESISTANT, THEN PULL THE ROPE AND
 START THE ENGINE.





CAUTION:

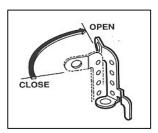
PULL THE ROPE HANDLE SLIGHTLY AND THEN JERK IMMDEIATELY WHEN YOU FEEL RESISTANT HOLD THE HANDLE AND LET IT GO STEP BY STEP WITH THE ROPE BOUNCING BACK

1.6 Warnings for operating road roller:

When using standard oil machines, the air with low oxygen content will make the concentration of Oil in the oil-gas mixture too high, which will result in the reduction level of efficiency of engine And the increase of the consumption of oil .Therefore it is necessary to change the nozzle of the carburetor with a smaller aperture and readjust the idle speed of the carburetor in order to improve the performance of the engine. But under the condition that the nozzle of the carburetor is fitted, the power of the engine will still reduce about 3.5% with each 300 meters raise of the sea level.

2. Using the ROAD ROLLER

- 2.1 Open the choke on the carburetor after start, warm up for about 5 Minutes.
- 2.2 Pull the operator handle, pull the accelerograph control handle to the Backmost end.



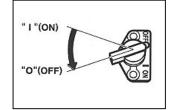
Warnings:

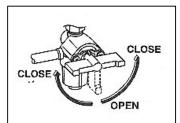
- After starting and warming up the machine, pull the control handle forward quickly. Don't let the Throttle in 1/2 of the full position. Otherwise the road roller will jump disorderly and the clutch will in The state of half-startup, thereby wear the clutch sharply and mangle the engine.
- The road roller will tip easily if the ground is rough, Please operator carefully to avoid sprain the Wrist or other parts of the body
- Never leave the machine unattended.
- Never run the machine on firm surface such as concrete.

VI. Turn Off

Directly switch down the machine in emergency. In normal case, shut down it as follows:

- 1. Push the oil throttle finger controlling switch to a foremost position to make the road roller stop working.
- 2. Turn the engine switch to OFF





3. Push the oil valve to OFF

Caution: DO not stop the engine when it is run at a high speed or it will cause the oil deterioration or the high temperature of the engine and the seizure of the parts.

VII. Inspection & Maintenance

Warnings:

Be sure to use the spare parts which we recommend.

Be sure to switch off the engine before examination and maintenance.

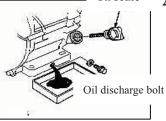
.Be sure to unbolt the spark plug cover before repair

Be sure to have the examination and maintenance for the machine periodically.

1. Engine periodic chart

Maintenance co	period ntent	Every Time Before Operation	Every Month or 20hours	Every 3 Month or 50 hours	Every 6 Month or 100 hours	Every Year or 300hours
Engine oil	Examine oil surface	•				
Air cleaner	Exchange Examine Clean	•			•	
Carburetor Settling cup	Clean				•	
Spark plug	Examine and clean			•		
Silencer	Clean				•	
Valve gap	Examine and adjust					•
Gasoline box And filter	Clean					•
Oil pipe	Examine and exchange					•





2. Engine oil

- 2.1 On exchanging the engine oil, it is better when the engine is Warm to discharge the oil quickly and completely.
- 2.2 After unscrewing the oil scale, then unscrew the oil discharge plug to discharge the oil.
- 2.3 Screw down the oil discharge plug tightly.

- 2.4 Fill up the oil and examine whether the oil level meet the requirement.
- 2.5 Install and screw down the oil scale.

Warnings:

Do not use the oil or low burning point agent to clean the air cleaner or it will cause tire explosion

No operation without air cleaner. It will bring great damage to the engine.

Clues:

There is danger of cancer in contacting the oil frequently, so wash up the hands with soap after work

Be sure to have a container when discharging oil. Do not spill oil on the ground and pollute the surrounding.

3. Maintenance of air cleaner

The dirty will keep air enter into the carburetor. Be sure to clean the air cleaner periodically, especially in dirty and dusty places.

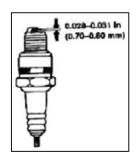
- 3.1 Lay down the swing nut and the outer shell of the air cleaner, take out the filter element and put them apart See if any of the two filter elements are broken, if so, change it.
- 3.2 Foam filter elements: wash with the domestic wash and warm water then rinse thoroughly. Or wash with nonflammable wash agent or high burning point agent. Dry out the element. Immerse the element in clean engine lubricant, then squeeze out the lubricant. Too much oil on the foam will cause smoke when starting the engine.
- 3.3 Paper element: gently hit the element on the hard surface to remove the dust on it, or with the high pressure current blowing from interior to exterior. Never brush dust away with brush. The brush will intrude dust into fiber. Exchange the element if it is very dirty.
 - 3.4 Reinstall the air cleaner.

4 Settling cup

4.1. Clean the carburetor and oil switch oily water separator
Close the oil valve, take off the settling cup and O-type ring, clean them with
nonflammable agent or high burning point agent install them and screw down, after
drying them out then open the oil valve to see if it is well sealed.

Warnings:

- 1) No smoking or fire source in cleaning the cup.
- 2) Be sure to examine if it is well sealed after installation, and open the machine only after on oil leaking.



5. Maintenance of spark plug

- 5.1Lay down the spark plug cap, unscrew the spark plug with relevant sleeve spanner.
- 5.2 Exchange the spark plug if the electrode of the spark plug is eroded by electricity or insulation part is broken.
- 5.3 If the carbon is seriously accumulated, brush it out with metal brush and reinstall it.
- 5.4Measure the plug gap with feeler and adjust it within normal scale: 0.7-0.8mm.
- 5.5Examine if the spark plug washer is broken

5.6 Screw the plug with hand first, then screw it tightly by spanner. (Do not screw it randomly.)

Warnings:

Do not use the plug with incorrect ignition scale.

There must be a certain gap and no foreign matter in spark plug to insure the normal operation of engine.

The temperature of vent pipe is very high just after shutdown. Do the maintenance after cooling off.

6. Adjustment of the idle speed of carburetor.

- 6.1 Start and warm up the engine.
- 6.2 Adjust the idle speed with adjustable screw to standard idle speed.

Standard idle speed: $1,400 \pm 150$ rpm

7. Adjusting the hand rest

The height of the hand rest is adjustable. Loosen the bolt on the actuating arm to adjust the needed height.

VIII. Transport and Storage

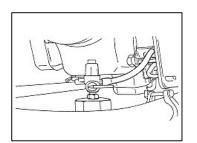
1. Transportation Requirements

- 1.1 Be sure to switch off the machine in a short transport and keep the engine in level to prevent the leaking of oil.
- 1.2 Be sure to discharge the oil in the gasoline tank and engine oil in a long transport.

Clues: If it must be transport without discharging the engine oil, the gradient must be less than 30. Or else it will make the engine oil flow into the cylinder or air cleaner to affect its normal operation.

2. Storage

- 2.1 Be sure to discharge all the oil in the gasoline tank before storage and keep the storage place dry and clean
- 2.2 Shut the oil throttle and open the carburetor settling cup
- 2.3 Open the oil throttle and discharge the oil into prepared container.
- 2.4 Dry out the oil and screw down the settling cup.
- 2.5 Lay down the spark plug, and add a spoon of engine oil to the cylinder, gently pull the guy rope for several times to make the oil uniform distributed, then reinstall the spark plug.
- 2.6 Put a cover on the engine to prevent the dust.



Clues: if it must be transport without discharging the engine oil, the gradient must be less than 30 stillness bottom up. Or else it will make the engine oil flow into the cylinder or air cleaner to affect its normal operation.

IX. Malfunction List

Malfunction	Reason
	1. NO fuel in tank
	2. Not switch on the engine
1 Unable to hard to start the engine or	3. Not open the oil valve
1. Unable to hard to start the engine or	4. Filter is blocked
disorderliness of the engine	5. No oil into the carburetor
	6. Spark plug fouled or broken
	1. Spark plug fouled
2.Engine does not accelerate, is hard to start, or	2. Air cleaner may be clogged
runs erratically	3. No oil into the carburetor
	4. Piston ring in/out air value are worn
	1. The screw at the engine's connecting tray is
2 Engine rung Dood roller eneration is errotic	loose
3. Engine runs. Road roller operation is erratic	2. Working spring broken
	3. Engine operating speed is too high

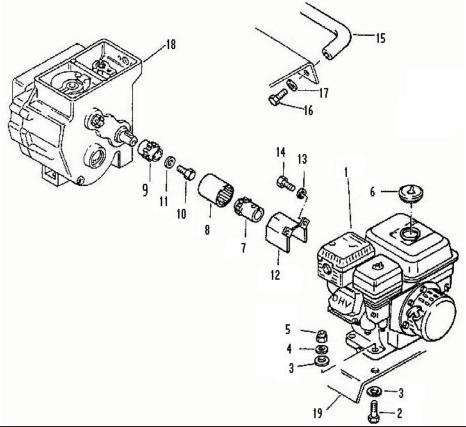
X. Technical parameters

Operating weight	175kg
Actiyator Range	3.1Kg/cm
Size : L*W*H	1810X915X915mm
Working width	560mm
Forward Speed	0.11Km/h
Backward Speed	0.11Km/h
Grade ability	$20^{0}/25^{0}$
Engine	6.5HP
Power	3.8kw
Setting rotate speed	2800/min
Fuel	gasoline
Driving system	mechanical
Frequency	77Hz
Swing	0.5mm
Centrifugal force	10KN
Asperse form	Gravity Sprinkling
Fuel volume	3.6L
Water tank volume	16L
Fuel grade	Above 90#
lubricant	SAE10W-30

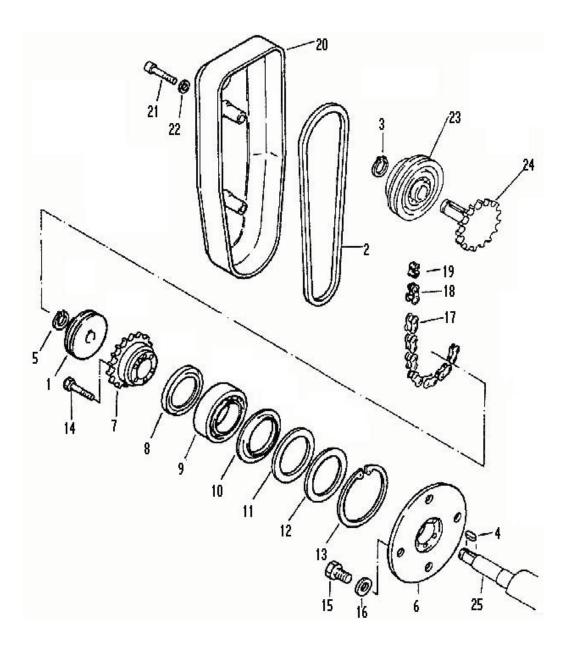
PARTS LIST

CATALOGUE

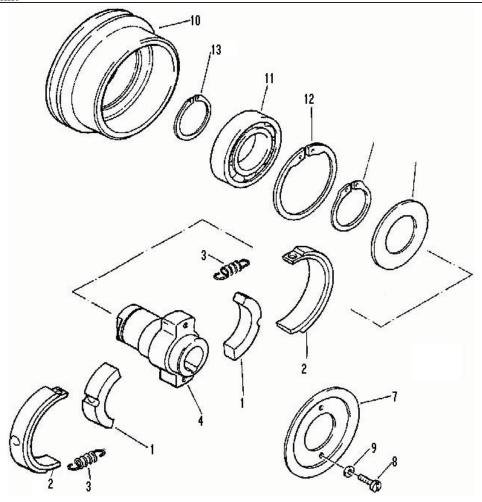
1.	Engine output unit	12
2.	Output unit	13
3.	Clutch unit	15
4.	Gear case appendage	16
5.	Gear case appendage	18
6.	Hand grip appendage	20
7.	Control Cable Subassembly	22
8.	Left bearing	24
9.	Right bearing	25
10.	Wheel wiper	26
11.	Sprinkling set	27
12.	Trolley	28



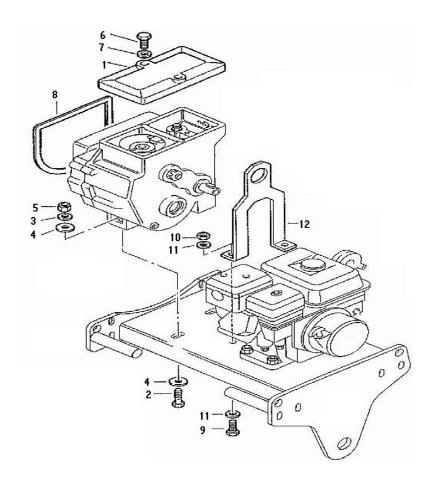
	_		
Sequence No	Part NO.	Name	Quantity
1	80122	Engine assemblyGX160	1
2		Outer hexagon bolt8*40	4
3		Plain cushion B8	8
4		Spring washer R8	4
5		Locknut M8	4
6		Fuel tank cover	1
7	51007	Power Output cave cover	1
8	51008	Linkage for axis	1
9	51009	Transferring Parts	1
10	51010	Outer hexagon bolt 8*30	1
11	51011	Spring washer R8	1
12	51012	Protective cover	1
13	51013	Spring washer R8	2
14	51014	Outer hexagon bolt	2
15	51015	Bent-form Handrail	2
16	51016	Hexagon nut	4
17	51017	Spring washer	4
18	55000	Gear case assembly	1
19		Engine soleplate	1



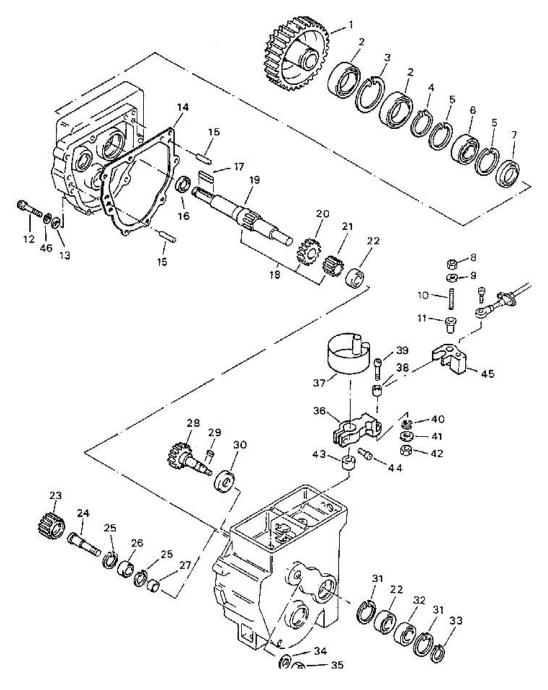
Sequence No	Parts NO.	Name	Quantity	
1	52001	V-type belt pulley	1	
2	52002	V-type belt	1	
3	52002	Lock ring for axis	1	
4	52003	Pin for vibratory drum axis	1	
5	52004	Slot for belt wheel axis	1	
6	52006	Flange	1	
7	52007	Sprocket wheel lower	1	
8	52008	Shaft seal	1	
9	52009	Bearing	1	
10	52010	Shaft seal	1	
11	52011	1 mm shim	2	
12	52012	0.3mm shim	1	
13	52013	Inner circlet	1	
14	52014	Hexagon bolt	6	
15	52015	Hexagon bolt	4	
16	52016	Spring cushion	4	
17	52017	Chain 08A	1	(include18-19)
18	52018	Joint piece of Linkage	1	
19	52019	Linkage Cylinder	1	
20	52020	Shell Cover	1	
21	52021	Convex Guard fixed bolt	2	
22	52022	Spring cushion	2	
23	52023	Belt pulley	1	
24	52024	Linkage Wheel	1	
25	52025	Output shaft	1	



Sequence No	Parts NO.	Name	Quantity	
	53000	Centrifugal Clutch Complete	1	
1	53001	Centrifugal Block	2	
2	53002	Friction plate	2	
3	53004	spring	2	
4	53005	Core	1	
5		Retaining ring	1	
6	53006	Outer circle	1	
7	53007	Outer cover board	1	
8	53008	Thrust cap bolt	2	
9	53009	Check washer	2	
10	53010	Hub	1	
11	53011	Ball bearing	1	
12	53012	Lock rings for	1	
13	53013	Lock ring for bearing	1	



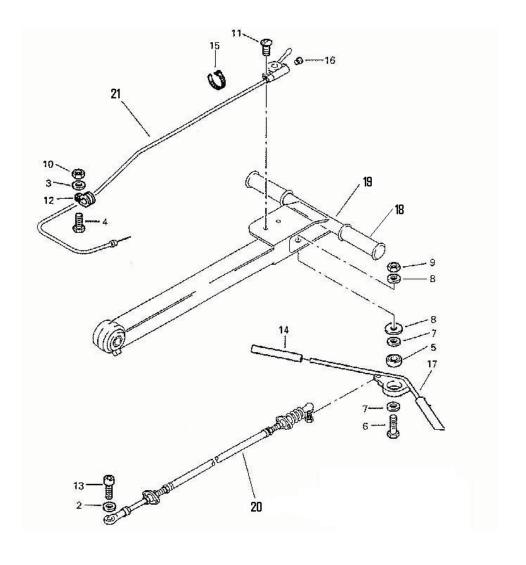
Sequence No	Part NO.	Name	Quantity	
1	54001	Gear box caver	1	
2	54002	Hexagon bolt	3	
3	54003	Spring washer	3	
4	54004	Plain cushion	6	
5	54005	Locknut	3	
6	54006	Hexagon bolt	2	
7	54007	Spring washer	2	
8	54008	O-ring seal	1	
9	54009	Hexagon bolt	2	
10	54010	Hexagon nut	2	
11	54011	Spring cushion	4	
12	54012	Heavy up holding	1	



Sequence No	Parts NO.	Name	Quantity	
1	55001	Gear wheel	1	
2	55002	Bearing	2	
3	55003	Lock ring for hole	1	
4	55004	Spring	1	
5	55005	Lock ring for hole	2	

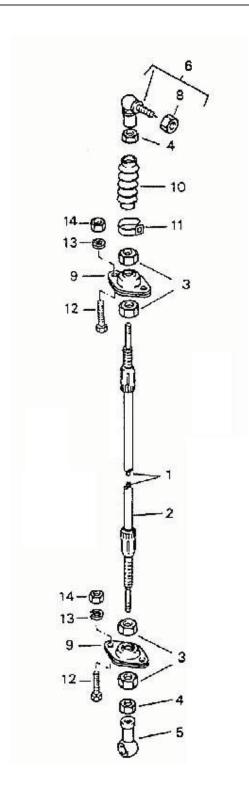
5. Parts of gear case

Sequence No	Parts NO.	Name	Quantity	
6	55006	Bearing	1	
7	55007	Shaft seal	1	
8	55008	Lock nut	1	
9	55009	Cushion	1	
10	55010	Bolt	1	
11	55011	Convex Holding	1	
12	55012	Thrust cap bolt	8	
13	55013	Washer	6	
14	55014	Gasket	1	
15	55015	Dowel pin	2	
16	55016	Retaining ring	1	
17	55017	Keying pin	1	
18	55018	Transmission shaft	1	
20	55019	Seal ring	1	
21	55020	Pinion	1	
22	55021	Bearing	2	
23	55023	Intermediate tine	1	
24	55024	Intermediate shaft	1	
25	55025	Lock ring for hole	2	
26	55026	Bearing	1	
27	55027	Insulate washer	1	
28	55028	Head shaft	1	
29	55029	Keying pin	1	
30	55030	Shaft seal	1	
31	55031	Lock ring for hole	2	
32	55032	Bearing	1	
33	55033	Lock ring for bearing	1	
34	55034	Washer	1	
35	55035	Hexagon nut	1	
36	55036	Joint rail	1	
37	55037	Reposition Spring	1	
38	55038	Sliding bush	1	
39	55039	Joint bolt	1	
40	55040	Spring washer	1	
41	55041	Plain cushion	1	
42	55042	Hexagon nut	1	
43	55043	Rubber bush	1	
44	55044	Lock bolt	1	
45	55045	Linkage Block	1	
46	55046	Spring washer	2	

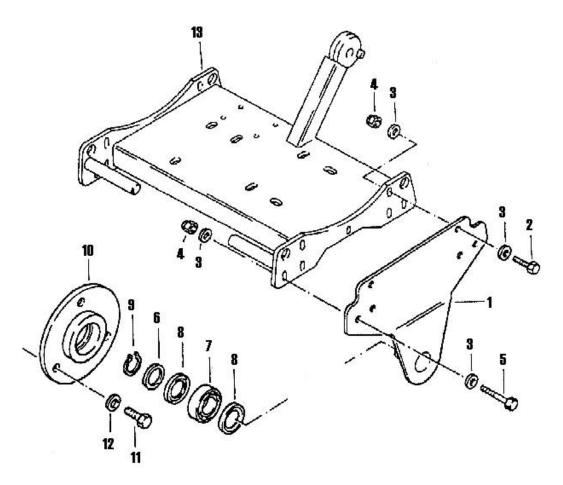


6. Hand grip appendage

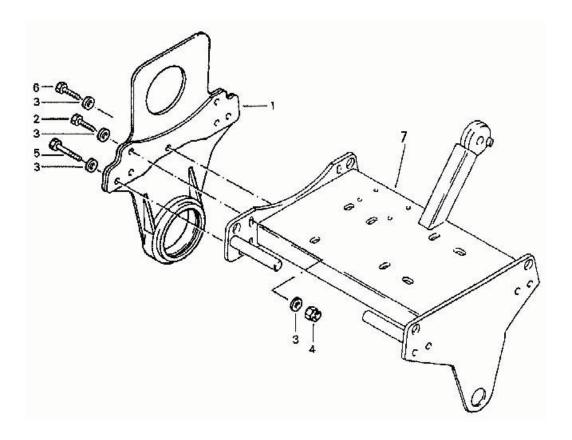
Sequence	D + NO	N		
No	Parts NO.	Name	Quantity	
1	56001	Drawback joystick	1	
2	56002	Plain cushion	1	
3	56003	Plain cushion	1	
4	56004	Hexagon bolt	1	
5	56005	Bearing	1	
6	56006	Hexagon bolt	1	
7	56007	Washer	2	
8	56008	Washer	5	
9	56009	Hexagon nut	1	
10	56010	Hexagon nut	1	
11	56011	Countersunk bolt	2	
12	56012	Fix-up jacket	1	
13	56013	Bolt	1	
14	56014	Blastomeric sleeve	2	
15	56015	Cable sleet	3	
16	56016	Protective stopper	1	
17	56017	Operative handspike	1	
18	56018	Bushing	1	
19	56019	Rider	1	
20	56020	Operative cable	1	
21	56021	Acceleration cable	1	



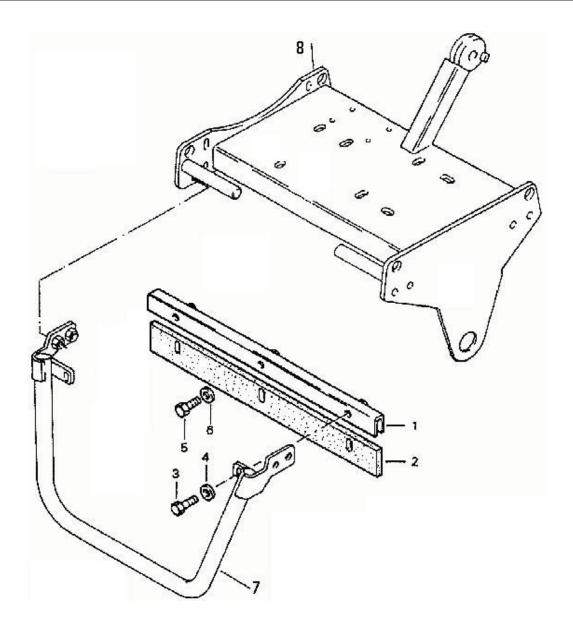
Sequence No	Parts NO.	Name	Quantity	
0	57000	Operative cable assembly	1	
1	57001	Operative handspike	1	
2	57002	Cable harness	1	
3	57003	Hexagon nut	4	
4	57004	Hexagon nut	2	
5	57005	Cable tie-in	1	
6	57006	Variant-angle joint	1	
8	57007	Lock nut	1	
9	57009	Spheroidal	2	
10	57010	Drawtube tube	1	
11	57011	Pipe damp	1	
12	57012	Hexagon bolt	4	
13	57013	washer	4	
14	57014	Hexagon nut	4	



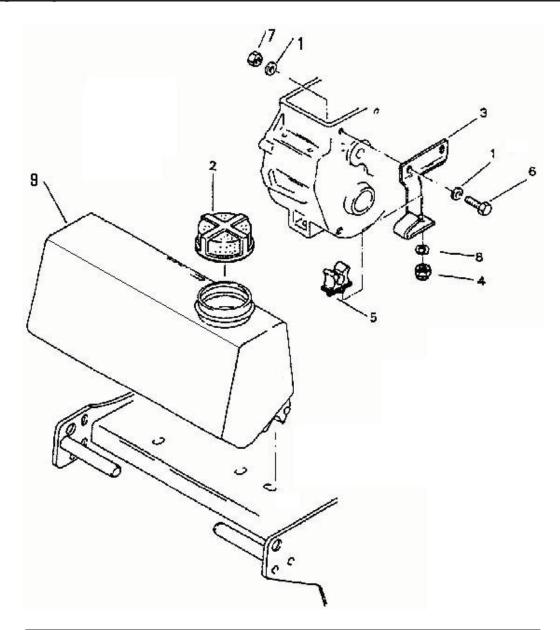
Sequence No	Part NO.	Name	Quantity
1	58001	Wheel carrior	1
		sheathing	
2	58002	Hexagon bolt	2
3	58003	Spring washer	10
4	58004	Lock nut	4
5	58005	Hexagon bolt	4
6	58006	Clearance plain washer	1
7	58007	Bearing	1
8	58008	Shaft seal	2
9	58009	Outer circle	1
10	58010	Flange	1
11	58011	Hexagon bolt	3
12	58012	Washer	3
13	58013	Engine soleplate	1



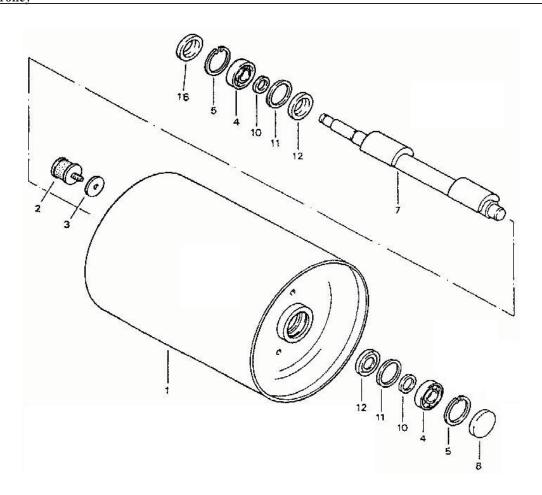
Sequence No	Part NO.	Name	Quantity	
1	59001	Wheel seat side plate	1	
2	59002	Hexagon bolt	3	
3	59003	Spring washer	12	
4	59004	Locknut	3	
5	59005	Hexagon bolt	4	
6	59006	Hexagon bolt	1	
7	59007	Engine soleplate	1	



Sequence No	Parts NO.	Name	Quantity	
1	51101	Wheel scraper	2	
2	51102	Wheel scraper	2	
3	51103	Hexagon bolt	4	
4	51104	Washer	4	
5	51105	Hexagon bolt	2	
6	51106	Washer	2	
7	51107	Knighthead	1	
8	51107	Engine soleplate	1	



Sequence	Parts NO.	Name	Quantity	
No				
1	51201	Washer	4	
2	51202	Water box cover	1	
3	51203	Water box bracket	1	
4	51204	Locknut	2	
5	51205	Slot	1	
6	51206	Hexagon bolt	2	
7	51207	Hexagon nut	2	
8	51208	Washer	2	



Sequence	Parts NO.	Name	Quantity	
No				
1	51301	Drum	1	
2	51302	Vibrator	7	
3	51303	Plain cushion	7	
4	51304	Bearing	2	
5	51305	Lock spring for hole	2	
6	51306	Shaft seal	1	
7	51307	Convex axis	1	
8	51308	Axle head cover	1	
9	51309	Spacing ring	1	
10	51310	Retaining ring	2	
11	51311	Retaining ring	2	
12	51312	Shaft seal	2	
13	51313	Retaining ring	1	
14	51314	Washer	1	
15	51315	Shaft seal	1	