

POWER THRESHER

DB 1000

OPERATION MANUAL & PART LIST



PT. YANMAR AGRICULTURAL MACHINERY MANUFACTURING INDONESIA (PT. YAMINDO)

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Dearest YANMAR Customers,

We hope these power thresher is the answer to your needs in completing post harvesting work especially for threshing process that is important for you.

Before use it, as an owner and especially the power thresher operators who operate it, should has been understood the important matter related with the installation, operation, adjustment and trouble shooting.

We include a specific list of spare parts, the number, name and quantity that you can use when you needed spare parts for repairs.

Always use YANMAR genuine parts to keep your power thresher functions maximum and avoid from other components damage

If you need more information, explanation about other YANMAR products, spare parts, service, please contact the nearest YANMAR marketing network to your address immediately.

You can also contact the dealer/party where you get this good, or contact our address listed at the back of this book

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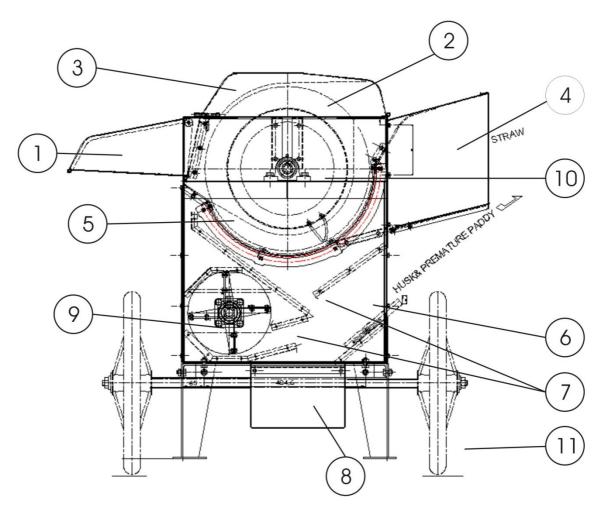
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1. SPECIFICATION

	MODEL	UNIT	DB 1000
TYPE			SINGLE DRUM
THROW TYPE			THROW-IN (DIRECT)
	OVERALL LENGTH	mm	1,034
DIMENSION (WITH TIRE)	OVERALL WIDTH	mm	1,183 (1,207)
	OVERALL HEIGHT	mm	1,462
WEIGHT WITHOUT E	NGINE	kg	130
TABLE THROW HEI	SHT	mm	944
MAIN PULLEY DIAM	ETER	mm	280
	LENGTH	mm	1,000
THRESHING DRUM	DIAMETER	mm	500
	ROTATION SPEED	hp	550 ~ 600
CLEANER TYPE			BLOWER BLADE
TEETH TYPE			SWIRL (CIRCULAR)
FILTER TYPE			RECTANGULAR BEAM
LENGTH PADDY STA	ALK	mm	300 - 900
THRESHING CAPAC	ПΥ	kg	1,000
POWER REQUIRE	DIESEL	hp	5,5
FOWER REQUIRE	GASOLINE	hp	7,0

2. NAME OF PARTS



Remarks:

- 1. Feed Table
- 2. Threshing Drum
- 3. Cover of Threshing Drum
- 4. Outlet Channel for Straw
- 5. Screen
- 6. Outlet Channel Husk Premature Paddy Husk
- 7. Separating Plate
- 8. Channel for Outlet Paddy
- 9. Blower fan
- 10. Main Shaft Bearing
- 11. Wheel

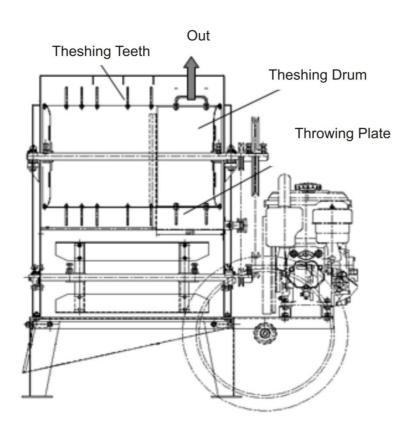
3. POWER THRESHER MECHANISM

The power thresher functions to release paddy from its stalks by throw in and separate the unused and accompanying things such as paddy stalks, empty paddy, dirt, etc so that the clean and perfect paddy gain is obtained.

A. THRESHING PROCESS

Paddy on the paddy stalk is threshed by threshing teeth that was installed on the threshing drum. During the threshing process, paddy stalk move automatically to outlet channel straw following the track in the thread of screw located in the threshing drum as the result of threshing teeth installation in a thread of screw on the threshing drum.

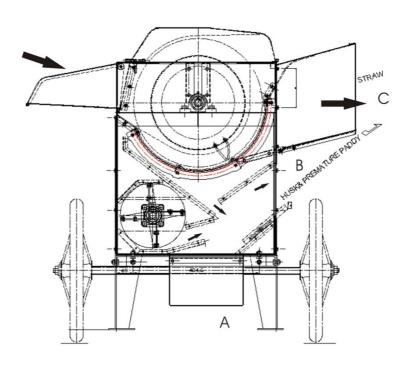
After paddy threshing process is over, straw are finally collected in the throwing space and thrown out directly by throwing plate.



Threshed paddy and light straw go down to section beneath the screen (separating plate) and then separated by separating plates helped by wind blow force from blower.

For paddy with water contain less than 20% separating process can be running well, clean paddy comes out at channel A, the damaged/light straw and husk comes out at channel B, rough straw comes out at channel C.

For paddy with water contain more than 20%, separating process at channel A and B cannot be running well. Both husk and paddy grain comes out at the same channel, at the channel A.



B. FEEDING SYSTEM

There are two feeding ways that applicable.

1. Hold-on system:

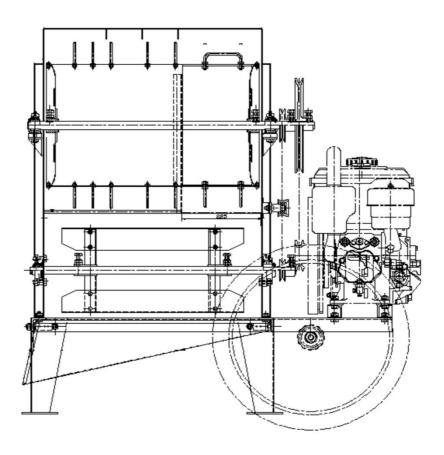
The lower of the stalk is held, the upper of the stalk is fed into the machine. By rotated the paddy stalk then the machine threshes it so fast without damaging the upper of paddy stalk. This system is applied for paddy stalk with length more than 30 cm or for paddy with water contain more than 22% (dry harvesting and flooded in the rain water).

2. Throw-in system:

All parts of paddy stalks are fed into the machine. This system is applicable for paddy stalk with length not more than 30 cm or for paddy with water contain less than 22%.

4. INSTALLATION

Choose the engine which is suitable with the thresher power required both its power and rotation speed, (calculate comparison between rotation speed of engine and power thresher to determine pulley size of the engine). Install the engine on the base is the recommended way.



Please check:

- 1. Direction of threshing drum rotation should be correct.
- 2. Position of both pulleys groove should be in the same line (center).
- 3. Tension of V-belt should be tight enough.
- 4. Tighten bolt on the base to prevent any change position or excessive vibration.

5. CONTROLLING

A. Without load:

After installation is finished, operate the machine without load and then:

- 1. Please check if all directions and speed rotation (rpm) is correct.
- 2. Please check if any unexpected and strange sound is heard or strong vibration is occurred so please fix it first.

B. With load:

After being run without load and there is no strange things happened, then please running the machine with load.

We suggest you to:

- 1. Please find the threshing location near with harvesting field to minimize any time loose for collecting the separate paddy stalk.
- 2. Please find the threshing place near with the power thresher so the paddy feeding into the feed table can be faster and continuously to achieve maximum efficiency.
- 3. Put the paddy stalk into the feed table by hand-held or hand-rotated (hold-on system) or feed all part of paddy stalk (throw in system).

6. ADJUSTMENT

When you operate the machine and needed to be adjusted so the adjustment can be done by changing the shaft rotation with condition :

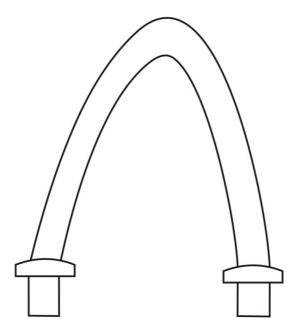
- a. If paddy stalk still discovered in channel B and C, it means that the power thresher rotation should be decreased.
- b. If a lot of impurity is discovered in channel A, it means that the power thresher rotation should be increased.

7. TROUBLE SHOOTING

No	Problem	Causes/Solved
1	Operation was stopped	V-belt is loosen
2	Paddy can't go to Channel A	Paddy water contain is too high
3	A lot of paddy stalk at Channel A	Paddy length is more than the recommended size
4	A lot of paddy stalk and dirt left in the threshing chamber	Engine power is too low
5	Paddy water contain is too high	Check and cleaned often the separating plate for husk Loosen the v-belt
6	The screen is damage	Threshing drum rotation is too fast

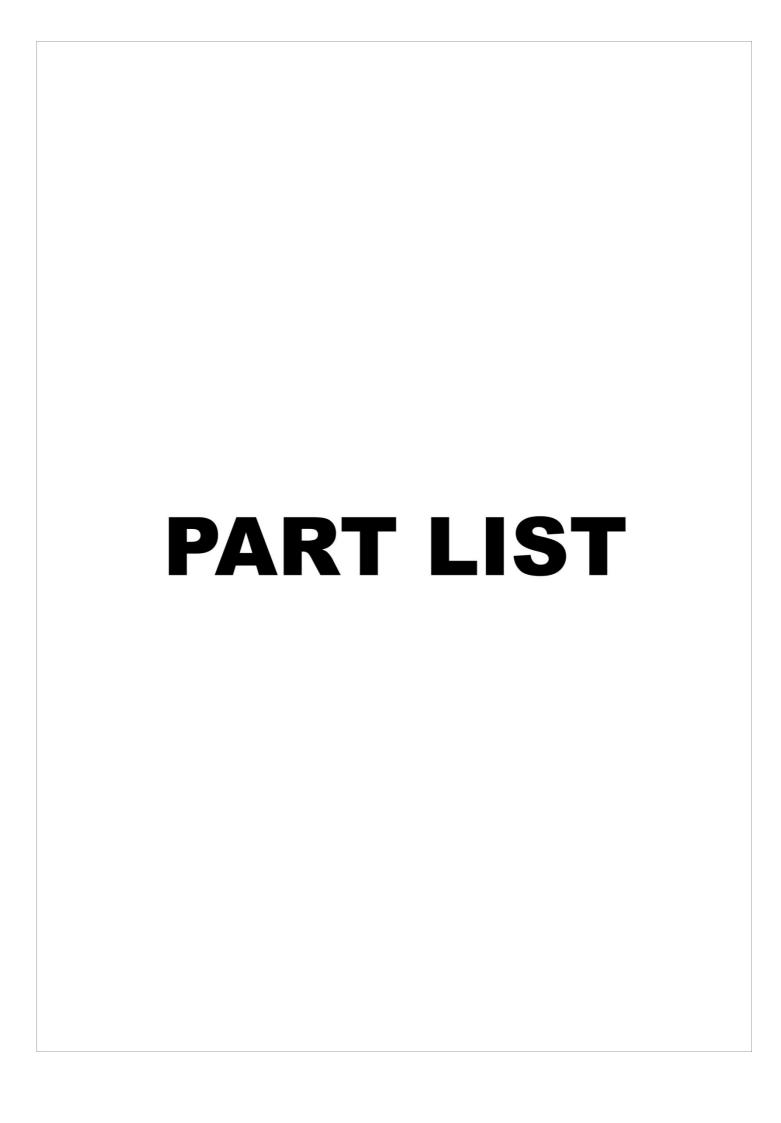
8. SPECIAL CONDITION

The power thresher equipped with the circular threshing teeth made from hardened steel.



The circular threshing teeth shape has some advantages:

- a. While the threshing process, the threshing teeth thresh the paddy stalk and hit the paddy stalk indirect so that no damage happened to the paddy grain.
- b. The position and shape of threshing teeth is strong and cannot be bended also maintains the threshing efficiency for long term without any repair.

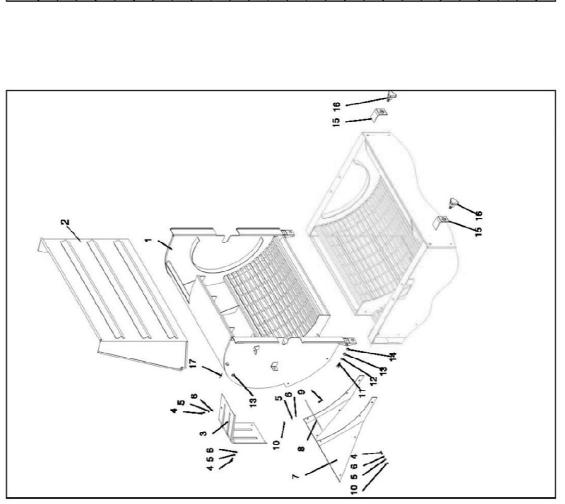


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1. DRUM COVER

ġ	PARTS NAME	PARTS NO.	QTY/UNIT	REMARKS
1-01	DRUM COVER	1F4801-11010	Ţ.	
1-02	FEED TABLE	1F4801-21010	τ	
1-03	BELT COVER UPPER	1F4801-11700	-	
4	HEX BOLT 8x16	26117-060162	9	
1-05	SPRING WASHER 6	22212-060000	8	
1-08	WASHER (SMALL/CIRC, 6)	22117-060000	8	
1-07	STRAW OUTLET COVER	1F4801-11600	-	
1-08	LINING PLATE	1F4801-11650	T	
1-09	SCREW (JP) 6x16	26557-060162	2	
1-10	HEX. NUT M6	26717-060002	9	
11	HEX.BOLT M10x20	26117-100202	2	
1-12	SPRING WASHER 10	22212-100000	2	
1-13	WASHER (SMALL/CIRC.) 8	22117-100000	2	
1-14	HEX. NUT M10	26717-100002	2	
1-15	LOCK PLATE	1F4801-11570	2	
1-18	SCREW HAND ASSY	1F4900-12141	2	
1-17	SPLIT PIN 2.5x25	22417-250250	٠	
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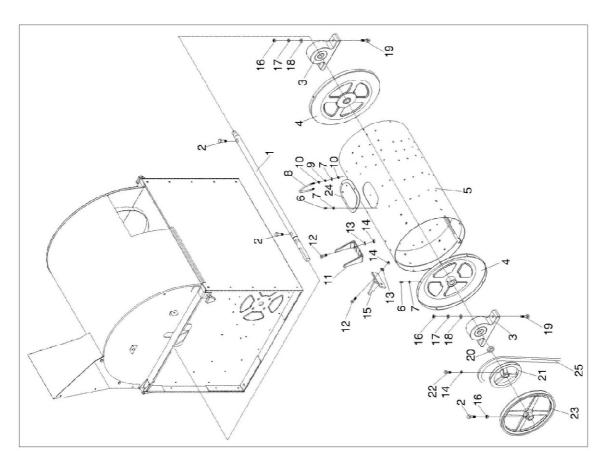


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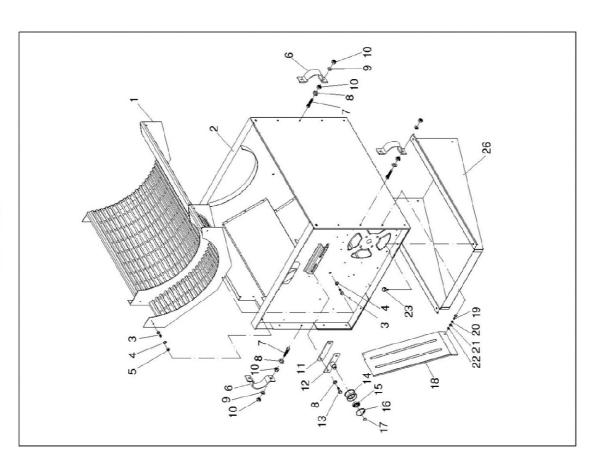
2. TRHESHING DRUM

2. THRESHING DRUM

Q'TY/UNIT REMARKS	-	2	2	2	-	20	128	56	112	224	8	12	12	12	က	2	4	4	4	-	1	-	-	-	-	
FARTS NO. Q'TY	1F4801-12090	26117-100252	24271-050013	1F4801-12100	1F4801-12010	26557-060122	22212-060000	1F4801-12080	22117-060000	26717-060002	1F4801-12150	26117-080202	22212-080000	26716-080002	1F4801-12200	26716-100002	22212-10000	22117-100000	26117-100352	1F4801-12250	1F4801-16020	26117-080252	1F4801-16010	1F4801-12050	25112-005500	
PARTS NAME	DRUM SHAFT	HEX. BOLT M10x25	PILLOW BLOCK UCP 205	SIDE DRUM	DRUM	SCREW (JP) 6x12	SPRING WASHER6	THRESHING TOOTH	WASHER (SMALLICIRC.) 6	HEX. NUT M6	THROWER A	HEX.BOLT M8X20	SPRING WASHER8	HEX. NUT M8	THROWER B	HEX. NUT M10	SPRING WASHER 10	WASHER (SMALLICIRC.) 10	HEX. BOLT M10x35	COLLAR 22x32x8	V PULLEY A 160	HEX. BOLT M8x25	MAIN V PULLEY 280	HOLE COVER	V-BELT A 55	
NO	2-01	2-02	2-03	2-04	2-05	5-06	2-07	2-08	5-09	2-10	2-11	2-12	2-13	2-14	2-15	2-16	2-17	2-18	2-19	2-20	2-21	2-22	2-23	2-24	2-25	

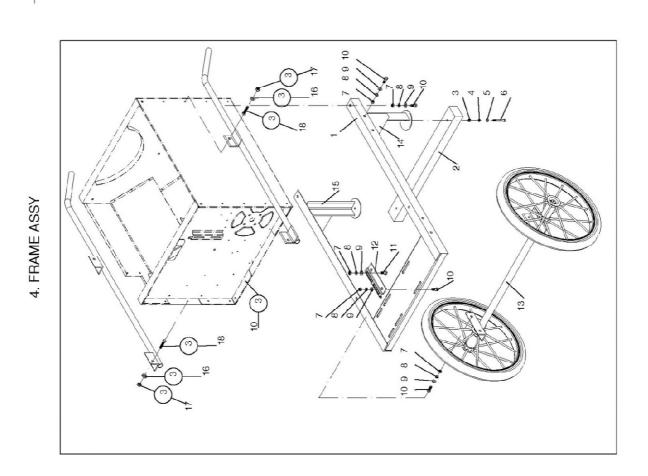


3.02		PARTS NO.	Q'TY/UNIT	REMARKS
	SIEVE	1F4801-13010	1	
	BODY ASSY	1F4801-51200	-	
3-03	HEX BOLT 7T M8x25	26116-080252	9	
3.04	SPRING WASHER 8	22212-080000	9	
3.05	HEX. NUT M8	26167-080002	-	
3.06	HOOK	1F4801-51270	4	
3-07	HEX. BOLT M 10x45	26117-100452	8	
30-6	SPRING WASHER 10	222212-100000	8	
3.09	WASHER (SMALL/CIRC.) 10	22117-100000	8	
3-10	HEX. NUT M10	26717-100002	16	
3.11	GUIDE PLATE	1F4900-731302	F	
3.12	TENSION	1F4900-73100	-	
3.13	HEX. BOLT M8x20	26117-060202	Q	
3.14	IDLER PULLEY	1F4900-73150	1	
3.15	BEARING 6202UU	24104-62024	1	
3.16	RETAINING RING H35	22252-000350	-	
3.17	RETAINING RING S15	22242-000150	1	
3.18	BELT COVER LOWER	1F4801-51300	1	
3.19	HEX. BOLT M6x16	26117-060162	8	
3.20	SPRING WASHER 6	22212-060000	O.	
3.21	WASHER (SMALL/CIRC.) 6	22117-060000	2	
3.22	HEX. NUT M6	26717-060002	a	
3.23	DOOR PLATE HANDLE	1G4200-51940	4	
3.24	ТВОИЗН	1F4801-54100	1	
3.25				
3.26				
3.27				



4. FRAME ASSY

NO.	PARTS NAME	PARTS NO.	QTY/UNIT	REMARKS
4.01	FRAME	1F4801-31010	1	
4.02	BOTTOM WOOD	1F4801-31350	1	
4.03	HEX. NUT M8	26717-080002	a	
4.04	SPRING WASHER 8	222212-080000	a	
4-05	WASHER (SMALL CIRC.) 8	22212-080000	a	
4.06	HEX. BOLT M8x65	26117-080652	2	
4.07	HEX. NUT M10	26717-100002	24	
4.08	SPRING WASHER 10	222212-100000	24	
4.09	WASHER (SMALL/CIRC.) 10	22117-100000	24	
4.10	HEX. BOLT M10x25	26117-100252	12	
4.11	HEX. BOLT M10x35	26117-100352	4	
4.12	ENGINE BASE	1A3530-11510	a	
4.13	TIRE RECOND ASSY	1F4801-31300	-	
4.14	REAR STAND	1F4801-31100	٠	
4.15	FRONT STAND	1F4801-31150	1	

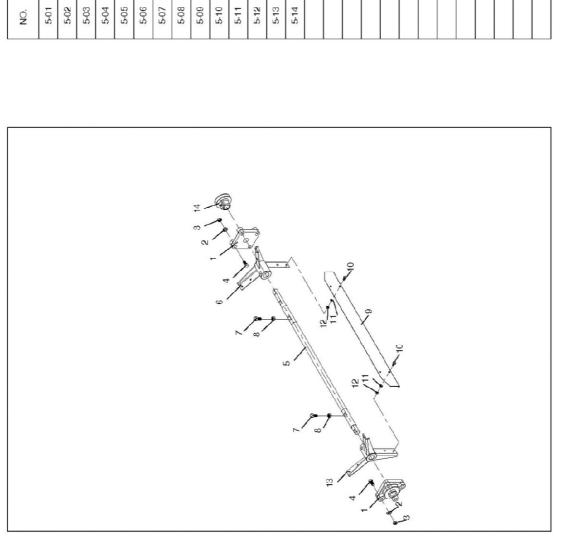


5. FAN ASSY

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Ö	PARTS NAME	PARTS NO.	Q'TY/UNIT	REMARKS
5.01	BEARING UCF 204	1G2011-61070	a	
5.05	SPRING WASHER 10	22212-100000	8	
5.03	HEX.NUT M10	26717-100002	8	
5.04	HEX. BOLT 7T M10x30	26116-100302	8	
50.5	FAN SHAFT	1F4801-61100	-	
90.5	FAN FRAME L	1F4801-61010	-	
2.07	HEX. BOLT M10x25	26117-100252	8	
5-08	HEX. NUT M10	26717-100002	Ø	
5-09	FAN BLADE	1F4801-61080	8	
5-10	HEX. BOLT M6x12	26117-060122	헏	
5.11	SPRING WASHER 6	22212-060000	5	
5.12	HEX. NUT M6	26717-060002	5	
5.13	FAN FRAME R	1F4801-61050	-	
5.14	FAN PULLEY	1F4801-61180	-	



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