

INTERCULTIVATOR/POWER WEEDER

AM-MPT-1100-9D CHAMPION- 3GEAR

ENGINE DIAGRAM WITH PART LIST



DESCLAIMER : DUE TO CONTANT UPGRADATION FEATURES & SPECIFICATIONS ARE SELECT TO CHANGE WITHOUT NOTICE

BEFORE OPERATING THIS MACHINE PLEASE READ THIS INSTRUCTIONS MANUAL CAREFULLY

INTRODUCTION

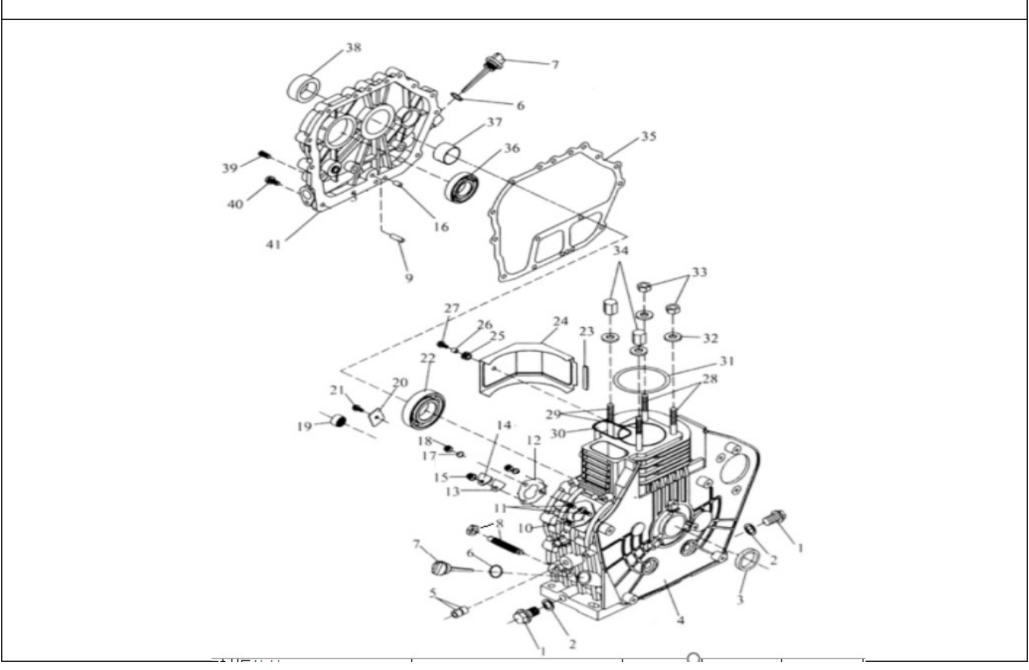
Dear Sir/ Madam,

Thank you for choosing Agrimate product. You are the proud owner of high technology & durable machine. Trust that our Franchisee/Dealer installed the product & installed the product and explained you about the usage & service instructions. Please visit our autorised dealer for your future requirement of our other equipments, genuine spares, accessories and services. Service coupons are attached with this manual and you can avail free service to keep your machine fit always to use on demand.

About Ratnagiri,

We import and market of high quality of agriculture wide range of equipments which we are selling through our authorised franchisee or dealer network. We are in this field from past years service the farmer. community. For further details, Please visit our website www.agrimart.in. & Give a missed call to 7393 938 938.

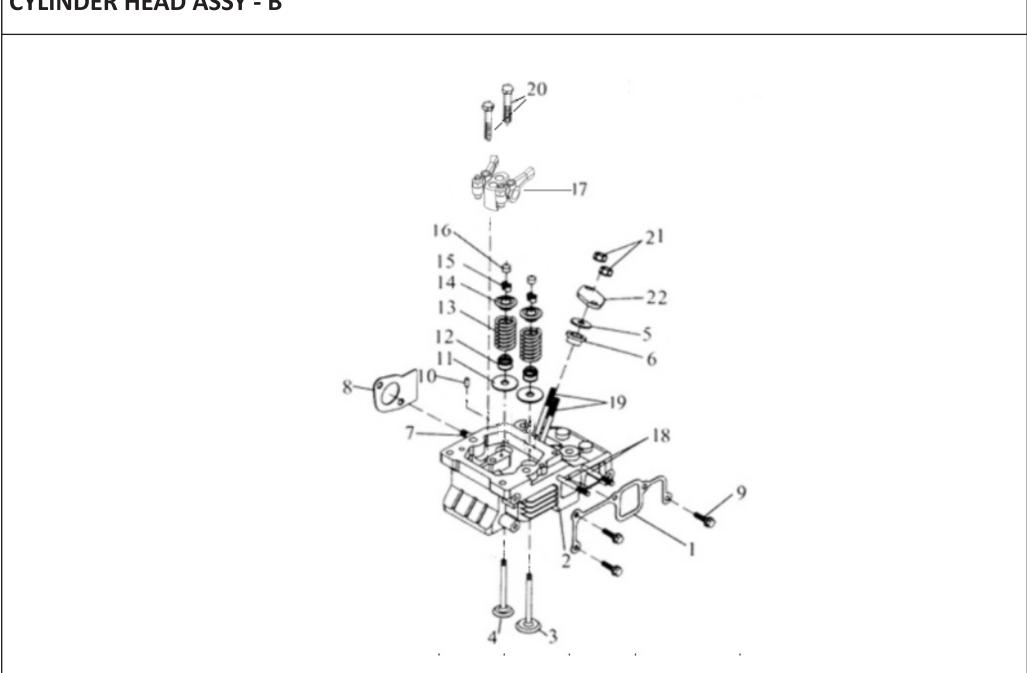




SL NO	PART NO	DESCRIPTION	SL NO	PART NO	DESCRIPTION
1	AM-186FDR-EA01	OIL DRAIN PLUG	17	AM-186FDR-EA17	SPRING WASHER
2	AM-186FDR-EA02	GASKET	18	AM-186FDR-EA18	NUT
3	AM-186FDR-EA03	OIL SEAL	19	AM-186FDR-EA19	NEEDLE BEARING
4	AM-186FDR-EA04	ENGINE BODY	20	AM-186FDR-EA20	THRUST PLATE
5	AM-186FDR-EA05	NEEDLE BEARING	21	AM-186FDR-EA21	BOLT
6	AM-186FDR-EA06	O RING SEAL	22	AM-186FDR-EA22	DEEP GROOVE BEARING
7	AM-186FDR-EA07	OIL DIPSTICK	23	AM-186FDR-EA23	SHOCK ABSORBER
8	AM-186FDR-EA08	FULE CONTROLLER ASSEM.	24	AM-186FDR-EA24	BLOWER PLATE
9	AM-186FDR-EA09	OIL GUIDING PIPE	25	AM-186FDR-EA25	SHOCK BLOCK
10	AM-186FDR-EA10	STUD(SHORT), FUEL INJECTION PUMP	26	AM-186FDR-EA26	BLOWER PLATE BUSH
11	AM-186FDR-EA11	STUD(LONG), FUEL INJECTION PUMP	27	AM-186FDR-EA27	BOLT AND WAHSER
12	AM-186FDR-EA12	FUEL INJECTION 'WASHER PUMP	28	AM-186FDR-EA28	CYLINDER HEAD STUD(SHORT)
13	AM-186FDR-EA13	SEAL PLATE WASHER	29	AM-186FDR-EA29	CYLINDER HEAD STUD(LONG)
14	AM-186FDR-EA14	SEALPLATE	30	AM-186FDR-EA30	GASKET©RECTANGLE®
15	AM-186FDR-EA15	NUT	31	AM-186FDR-EA31	CYLINDER COVER GASKET
16	AM-186FDR-EA16	ROUND PIN	32	AM-186FDR-EA32	CYLINDER HEAD 'WASHER

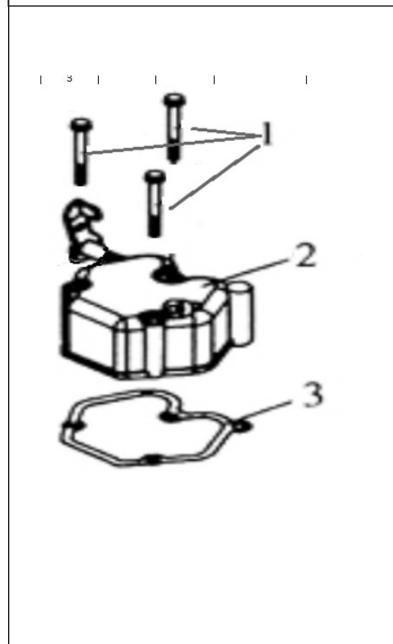
					I
SL NO	PART NO	DESCRIPTION	SL NO	PART NO	DESCRIPTION
33	AM-186FDR-EA33	'CYLINDER HEAD 'NUT(THIN)			
34	AM-186FDR-EA34	' CYLINDER HEAD 'NUT(THICK)			
35	AM-186FDR-EA35	CRANKCASE COVER GASKET			
36	AM-186FDR-EA36	DEEP GROOVE BALL BEARING			
37	AM-186FDR-EA37	SLIDNG BEARING			
38	AM-186FDR-EA38	OIL SEAL(FRONT)			
39	AM-186FDR-EA39	HEAD PLUG			
40	AM-186FDR-EA40	BOLT			
41	AM-186FDR-EA41	CRANKCASE COVER			





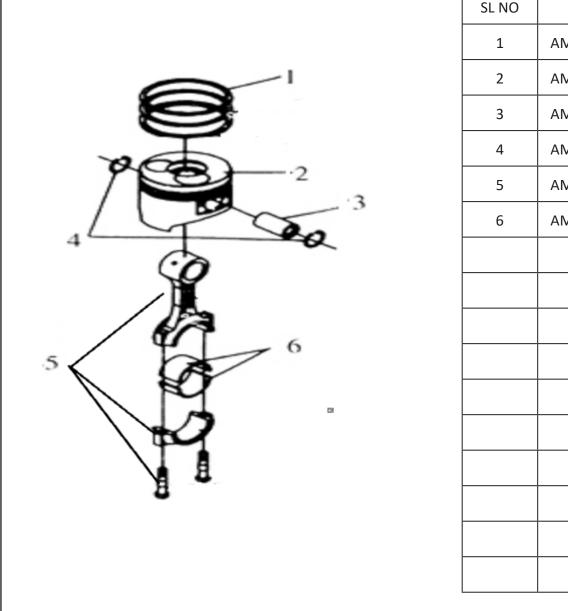
SL NO	PART NO	DESCRIPTION	SL NO	PART NO	DESCRIPTION
1	AM-186FDR-EB01	INLET PIPE GASKET	17	AM-186FR-EB17	VALVE ROCKER ARM SEAT ASSY
2	AM-186FDR-EB02	CYLINDER HEAD SUBASSY.	18	AM-186FR-EB18	CYLINDER HEAD 'STUD
3	AM-186FDR-EB03	INLET VALVE	19	AM-186FR-EB19	CYLINDER HEAD 'STUD
4	AM-186FDR-EB04	OUTLET VALVE	20	AM-186FR-EB20	BOLT
5	AM-186FDR-EB05	WASHER OF INJECT PUMP	21	AM-186FR-EB21	NUT
6	AM-186FDR-EB06	LAGGING SLEEVE	22	AM-186FR-EB22	INJECTION PUMP
7	AM-186FDR-EB07	STUD			
8	AM-186FDR-EB08	OUTLET PIPE 'GASKET			
9	AM-186FDR-EB09	HEXAGON NUT WITH FLANGE			
10	AM-186FDR-EB10	ROUND PIN			
11	AM-186FDR-EB11	WASHER			
12	AM-186FDR-EB12	OIL SEAL			
13	AM-186FDR-EB13	INLET VALVE 'SPRING			
14	AM-186FDR-EB14	INLET VALVE 'SPRING SEAT			
15	AM-186FDR-EB15	VALVE CLAMP			
16	AM-186FR-EB16	VALVE ADJUSTING PAD			

CYLINDER HEAD COVER - C



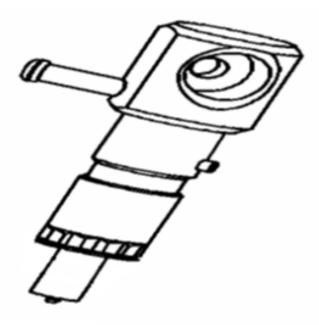
SL NO	PART NO	DESCRIPTION
1	AM-186FDR-EC01	CYLINDER HEAD COVER SUBASSY
2	AM-186FDR-EC02	CYLINDER HEAD BOLT
3	AM-186FDR-EC03	CYLINDER HEAD COVER GASKET

PISTON ASSY - D



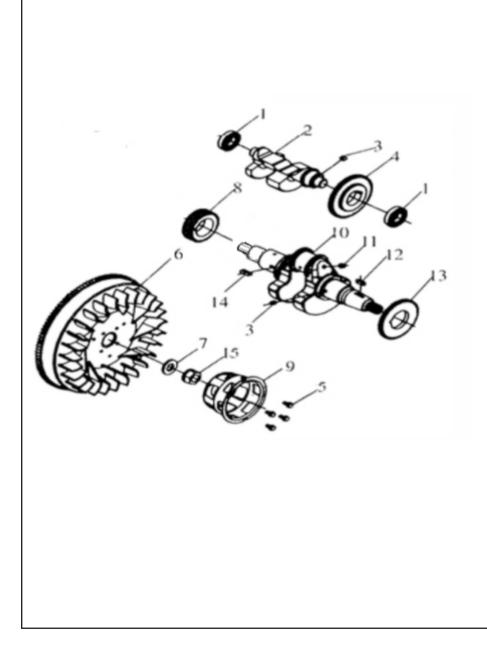
PART NO	DESCRIPTION
AM-186FDR-ED01	PISTON RING SETS
AM-186FDR-ED02	PISTON
AM-186FDR-ED03	PISTON PIN
AM-186FDR-ED04	SPRING CIRCLIP
AM-186FDR-ED05	CONNECTING ROD SUBASSY
AM-186FDR-ED06	CONNECTING ROD SHAFT BUSHING
	AM-186FDR-ED01 AM-186FDR-ED02 AM-186FDR-ED03 AM-186FDR-ED04 AM-186FDR-ED05

INJECTOR ASSY - E



SL NO	PART NO	DESCRIPTION
1	AM-186FDR-EE01	INJECTOR ASSY

CRANKSHAFT AND FLYWHELL ASSY - F

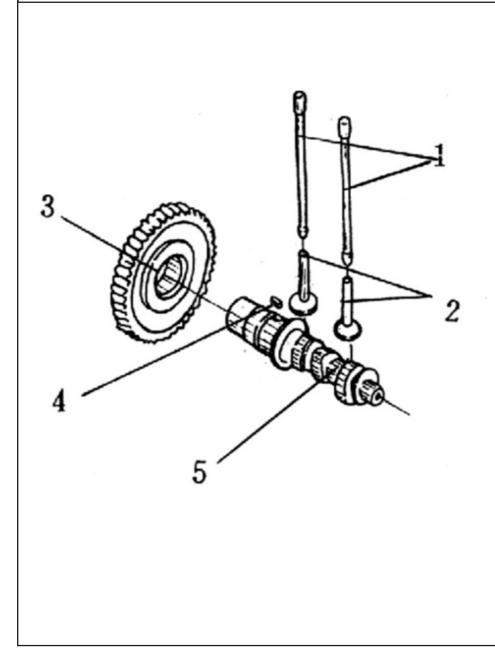


SL NO	PART NO	DESCRIPTION
1	AM-186FDR-EF01	DEEP GROOVE BEARING
2	AM-186FDR-EF02	BALANCE SHAFT
3	AM-186FDR-EF03	FLAT KEY
4	AM-186FDR-EF04	BALANCE SHAFT 'TIMING GEAR
5	AM-186FDR-EF05	HEXAGON BOLT WITH FLANGE
6	AM-186FDR-EF06	FLYWHEEL
7	AM-186FDR-EF07	FLYWHEEL NUT WASHER
8	AM-186FDR-EF08	CRANKSHAFT 'TIMING GEAR
9	AM-186FDR-EF09	STARTING RATCHET REEL
10	AM-186FDR-EF10	CRANKSHAFT
11	AM-186FDR-EF11	Steel ball
12	AM-186FDR-EF12	KEY
13	AM-186FDR-EF13	BALANCE SHAFT DRIVING GEAR
14	AM-186FDR-EF14	KEY
15	AM-186FDR-EF15	FLYWHEEL NUT

AIR CLEANER - G

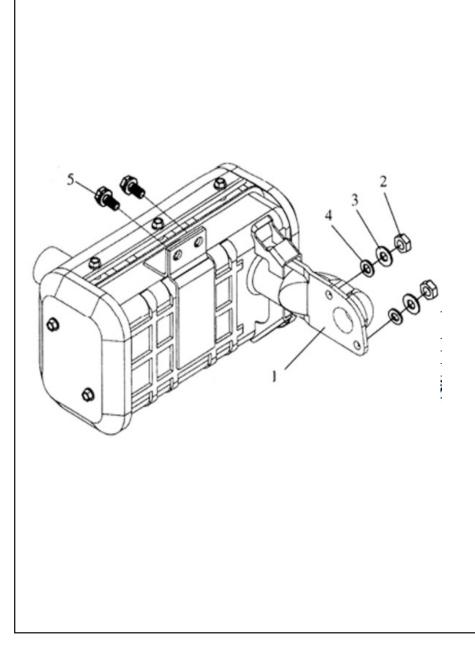
		I	
	SL NO	PART NO	DESCRIPTION
	1	AM-186FDR-EG01	AIR CLEANER ASSY
	2	AM-186FDR-EG02	SPONG
3	3	AM-186FDR-EG03	SPONG
	4	AM-186FDR-EG04	BOLT
	5	AM-186FDR-EG05	BOLT
5 Jag	6	AM-186FDR-EG06	AIRFILTER BASE
	7	AM-186FDR-EG07	BOLT
	8	AM-186FDR-EG08	TRIANGLE WASHER
	9		
	10		
	11		
	12		
	13		
	14		
	15		

CAMSHAFT ASSY - H



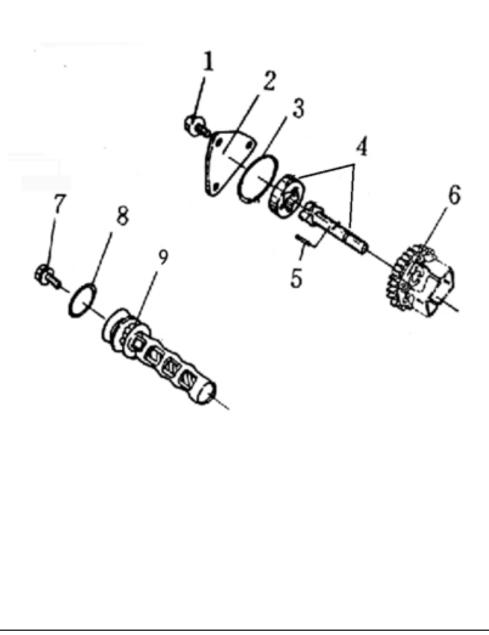
SL NO	PART NO	DESCRIPTION
1	AM-186FDR-EH01	VALVE PUSH ROD SUBASSY
2	AM-186FDR-EH02	VALVE TAPET
3	AM-186FDR-EH03	CAMSHAFT TIMING GEAR
4	AM-186FDR-EH04	FLAT KEY
5	AM-186FDR-EH05	CAMHAFT
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
L	1	

MUFFLER SUBASSY -J



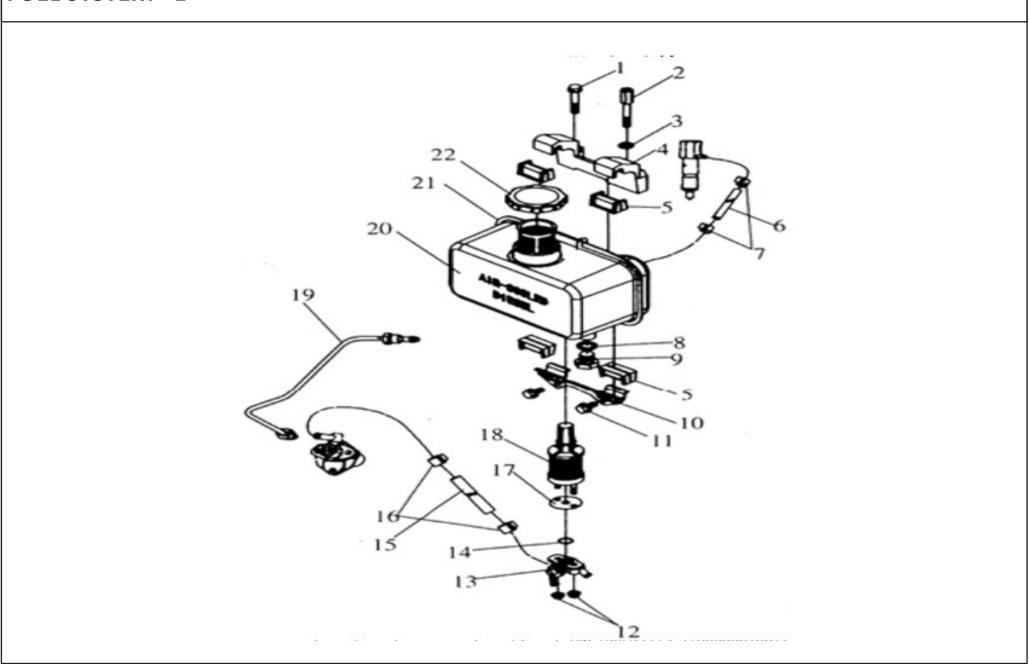
SL NO	PART NO	DESCRIPTION
1	AM-186FDR-EJ01	MUFFLER SUBASSY
2	AM-186FDR-EJ02	NUT
3	AM-186FDR-EJ03	SPRING WASHER
4	AM-186FDR-EJ04	WASHER
5	AM-186FDR-EJ05	HEXAGON NUT WITH FLANGE
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

LUBRICATION SYSTEM - K



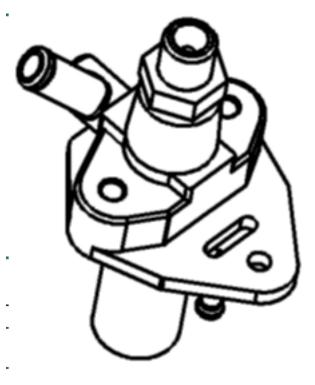
PART NO	DESCRIPTION
AM-186FDR-EK01	HEXAGON BOLT WITH FLANGE
AM-186FDR-EK02	OIL PUMP COVER PLATE
AM-186FDR-EK03	O-RING SEAL
AM-186FDR-EK04	OIL PUMP SUBASSY
AM-186FDR-EK05	ROUND PIN
AM-186FDR-EK06	OIL PUMP DRIVIN GEAR SUBASSY
AM-186FDR-EK07	HEXAGON BOLT WITH FLANGE
AM-186FDR-EK08	O-RING SEAL
AM-186FDR-EK09	OIL FILTER SUBASSY
	AM-186FDR-EK01 AM-186FDR-EK02 AM-186FDR-EK03 AM-186FDR-EK04 AM-186FDR-EK05 AM-186FDR-EK06 AM-186FDR-EK07 AM-186FDR-EK08

FUEL SYSTEM - L



					DECODIDEION
SL NO	PART NO	DESCRIPTION	SL NO	PART NO	DESCRIPTION
1	AM-186FDR-EL01	ROCKER ARM SEAT 'BOLT	17	AM-186FDR-EL17	FUEL FILET GASKET
2	AM-186FDR-EL02	FUEL TANK BRACKET 'BOLT	18	AM-186FDR-EL18	FUEL FITLER ELEMENT SUBASSY
3	AM-186FDR-EL03	WASHER	19	AM-186FDR-EL19	HIGH PRESSURE PIPE SUBASSY
4	AM-186FDR-EL04	FUEL TANK 'UPPER BRACKET	20	AM-186FDR-EL20	FUEL TANK WELDING PART
5	AM-186FDR-EL05	SHOCK ABSORBING 'CUSHION	21	AM-186FDR-EL21	FUEL FITLER STRAINER
6	AM-186FDR-EL06	OIL RETURN PIPE	22	AM-186FDR-EL22	FUEL CAP
7	AM-186FDR-EL07	OIL RETURN PIPE CLAMP			
8	AM-186FDR-EL08	WASHER			
9	AM-186FDR-EL09	BOLT			
10	AM-186FDR-EL10	FUEL TANK LOWER BRACKET			
11	AM-186FDR-EL11	BOLT			
12	AM-186FDR-EL12	HEXAGON NUT WITH FLANGE			
13	AM-186FDR-EL13	FUEL TANK 'ON/OF SWITCH BODY			
14	AM-186FDR-EL14	FUEL TANK 'WASHER FOR ON/OF SWITCH BODY			
15	AM-186FDR-EL15	FUEL INLET PIPE			
16	AM-186FDR-EL16	FUEL INLET PIPE CLAMP			

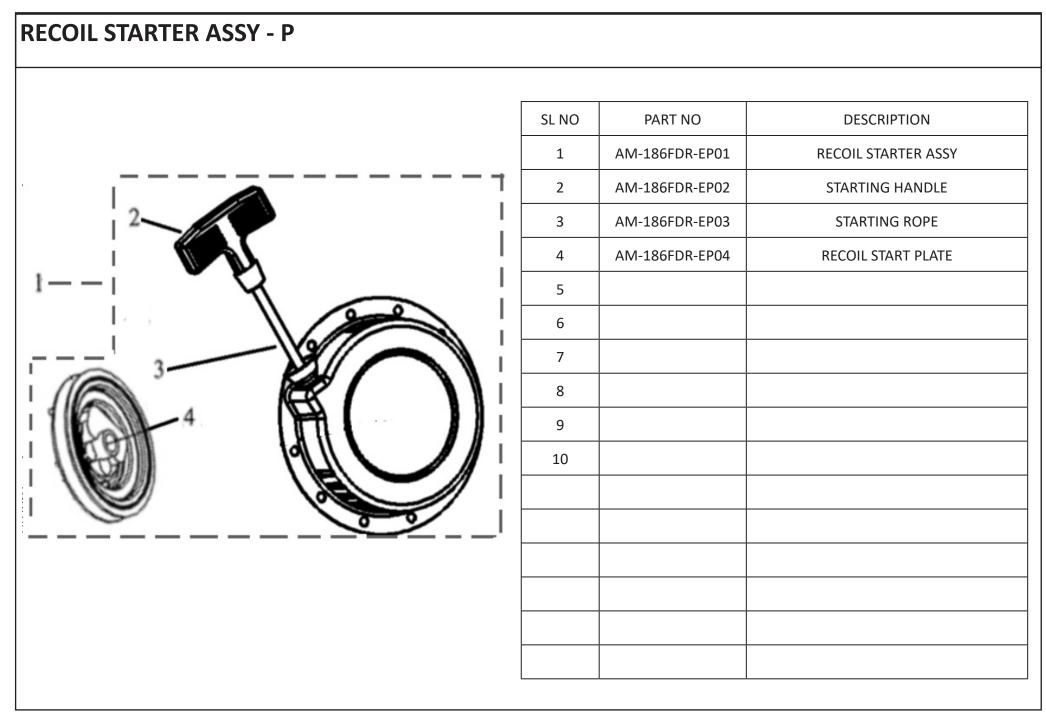
INJECT PUMP ASSY - M



SL NO	PART NO	DESCRIPTION
1	AM-186FDR-EM01	FULE INJECTION PUMP

GOVERNER SYSTEM - N

	SL NO	PART NO	DESCRIPTION
	1	AM-186FDR-EN01	SPEED GOVERNOR SPRING
	2	AM-186FDR-EN02	RELEASE SPRING 🛛
	4 000	AM-186FDR-EN03	SPEED GOVERNER ARM ASSY
	4	AM-186FDR-EN04	PUSH PLATE, SPEED GOVER
	5	AM-186FDR-EN05	HEXAGON BOLT WITH FLANGE
	90 6	AM-186FDR-EN06	HEXAGON BOLT WITH FLANGE
	7	AM-186FDR-EN07	SPEED GOVERNER LEVER FORK ASSY
	8	AM-186FDR-EN08	LEVER SHAFT OIL SEAL
or I The	9	AM-186FDR-EN09	FLAT WASHER
3 2	10	AM-186FDR-EN10	RELEASE SPRING 2
5			



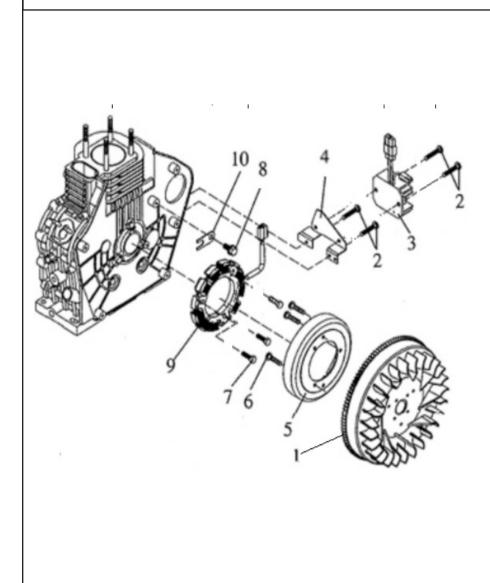
SHROUD ASSY - Q

	SL NO	PART NO	DESCRIPTION
	1	AM-186FDR-EQ01	SEAL STRIP
	2	AM-186FDR-EQ02	SHROUD
	3	AM-186FDR-EQ03	CUSHION, SHOCK ABSORBING
A STA	4	AM-186FDR-EQ04	SHEATH
Charles 1	5	AM-186FDR-EQ05	BOLT AND WAHSHER ASSY
	6		
	7		
	8		
1	9		
2 2	10		
3			
<u> </u>			

MOTOR STARTER ASSY - R

	SL NO	PART NO	DESCRIPTION
	1	AM-186FDR-ER01	MORTOR STARTER
	2	AM-186FDR-ER02	BOLT
60000	3		
	4		
000	5		
(APS	6		
900 400	7		
7000	8		
2	9		
- 1	10		

FLY WHEEL AND ALTERNATOR ASSY - S



SL NO	PART NO	DESCRIPTION
1	AM-186FDR-ES01	FLY WHEEL TEETH RING
2	AM-186FDR-ES02	BOLT
3	AM-186FDR-ES03	VOLT REGULATOR
4	AM-186FDR-ES04	VOLT REGULATOR BRACKET
5	AM-186FDR-ES05	ROTOR
6	AM-186FDR-ES06	SCREW
7	AM-186FDR-ES07	BOLT
8	AM-186FDR-ES08	BOLT
9	AM-186FDR-ES09	STATOR
10	AM-186FDR-ES10	WIRE FIXED PLATE

WARRANTY CARD

CUSTOMER COPY

DATE	DATE OF DELIVERY	DEALERS OFFICIAL SEAL	DEALERS SIGN
PURCHASERS NAME & ADDRESS			
	CUSTOMER SIGN		
PRODUCT NAME	PRODUCT SERIAL NO.	INVOICE/DN	NO.
I/Will accept the t	erms and conditions of warranty as in the warra	anty card	
• • • • • • • • • • • • • • • • • • • •	DEALERS COPY		• • • • • • • • • • • • • • • • • • • •
DATE	DATE OF DELIVERY	DEALERS OFFICIAL SEAL	DEALERS SIGN
PURCHASERS NAME & ADDRESS			
	CUSTOMER SIGN		
		_	
PRODUCT NAME	PRODUCT SERIAL NO.	INVOICE/DN 1	NO.
I/Will accept the ter	ms and conditions of warranty as in the warran	ty card	
	COMPANY COPY	• • • • • • • • • • • • • • • • • • • •	
DATE	DATE OF DELIVERY	DEALERS OFFICIAL SEAL	DEALERS SIGN
PURCHASERS NAME & ADDRESS			
	CUSTOMER SIGN		
PRODUCT NAME	PRODUCT SERIAL NO.	INVOICE/DN N	IO.
I/Will accept the te	rms and conditions of warranty as in the warrar	nty card	

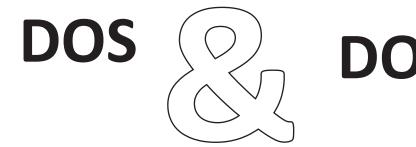
1.LIMITED WARRANTY PERIOD : For a period of six months from the date of Sale / delivery of the product which ever is earlier. 2. LIMITED WARRANTY OBLIGATION : Replacement of defective part(s) by authorized dealer are free of charges. If found defective by reasons of defective material / poor workmanship, parts will be replaced and there will be no value re-imbursement, 3. TERMS & CONDITIONS : a. Claims under warranty will be accepted on submission of Warranty Card duly filled and stamped by authorized dealer together with the original purchase document. : b. Shipping / transportation / Incidental charges incurred in replacing defective parts under warranty shall be borne by the purchaser WARRANTY null & void if (i) Lack of maintenance, (ii) Incorrect use of the machine or tampering, (iii) Use of non-genuine spare parts, (iv) Usage of acids, solvents, or any flammable materials, (v) Non-usage of filter water / clear water / soft water & using water above 40°C temperature, (vi) While using the pressure washers to draw water which is contaminated with dust & solvents (eg. paint thinners, gasoline, oil, etc.), (vii) Repair done by unauthorized service people, (viii) Those parts subject to wear & tear due to normal operations and plastic parts, rubber items etc. (ix) Loose connections, faulty electrical fixtures & fluctuations in power supply. 4. Should any failure occur during or after the warranty period, customer does not have the right to interrupt payment / price discount. 5. Incidental or consequential damages like inconvenience commercial loss, loss of tie, mental agony etc. 6. Loss of any nature due to operation or non-operation is not covered under warranty. 7. All free service are at Dealer's service point only. 8. Warranty ceases if service is not done periodically. 9. The attached card should be completed and returned to Ratnagiri Impex Pvt. Ltd. for registration immediately after sale / delivery. 10. The warranty is void unless you register the warranty card with Ratnagiri Impex Pvt. Ltd. 11. The decision of Ratnagiri Impex Pvt. Ltd., in settling the warranty is final in all respects. 12. All disputes are subject to Bangalore Courts Jurisdiction 1. LIMITED WARRANTY PERIOD : For a period of six months from the date of Sale / delivery of the product which ever is earlier. 2. LIMITED WARRANTY OBLIGATION : Replacement of defective part(s) by authorized dealer are free of charges. If found defective by reasons of defective material / poor workmanship, parts will be replaced and there will be no value re-imbursement. 3. TERMS & CONDITIONS : a. Claims under warranty will be accepted on submission of Warranty Card duly filled and stamped by authorized dealer together with the original purchase document. : b. Shipping / transportation / Incidental charges incurred in replacing defective parts under warranty shall be borne by the purchaser. WARRANTY null & void if (i) Lack of maintenance, (ii) Incorrect use of the machine or tampering, (iii) Use of non-genuine spare parts, (iv) Usage of acids, solvents, or any flammable materials, (v) Non-usage of filter water / clear water / soft water & using water above 40°C temperature, (vi) While using the pressure washers to draw water which is contaminated with dust & solvents (eg. paint thinners, gasoline, oil, etc.), (vii) Repair done by unauthorized service people, (viii) Those parts subject to wear & tear due to normal operations and plastic parts, rubber items etc, (ix) Loose connections, faulty electrical fixtures & fluctuations in power supply. 4. Should any failure occur during or after the warranty period, customer does not have the right to interrupt payment / price discount. 5. Incidental or consequential damages like inconvenience commercial loss, loss of tie, mental agony etc. 6. Loss of any nature due to operation or non-operation is not covered under warranty. 7. All free service are at Dealer's service point only. 8. Warranty ceases if service is not done periodically. 9. The attached card should be completed and returned to Ratnagiri Impex Pvt. Ltd. for registration immediately after sale / delivery. 10. The warranty is void unless you register the warranty card with Ratnagiri Impex Pvt. Ltd. 11. The decision of Ratnagiri Impex Pvt. Ltd., in settling the warranty is final in all respects. 12. All disputes are subject to Bangalore Courts Jurisdiction 1. LIMITED WARRANTY PERIOD : For a period of six months from the date of Sale / delivery of the product which ever is earlier. 2. LIMITED WARRANTY OBLIGATION : Replacement of defective part(s) by authorized dealer are free of charges. If found defective by reasons of defective material / poor workmanship, parts will be replaced and there will be no value re-imbursement. 3. TERMS & CONDITIONS : a. Claims under warranty will be accepted on submission of Warranty Card duly filled and stamped by authorized dealer together with the original purchase document. : b. Shipping / transportation / Incidental charges incurred in replacing defective parts under warranty shall be borne by the purchaser. WARRANTY null & void if (i) Lack of maintenance, (ii) Incorrect use of the machine or tampering, (iii) Use of non-genuine spare parts, (iv) Usage of acids, solvents, or any flammable materials, (v) Non-usage of filter water / clear water / soft water & using water above 40°C temperature, (vi) While using the pressure washers to draw water which is contaminated with dust & solvents (eg. paint thinners, gasoline, oil, etc.), (vii) Repair done by unauthorized service people, (viii) Those parts subject to wear & tear due to normal operations and plastic parts, rubber items etc, (ix) Loose connections, faulty electrical fixtures & fluctuations in power supply. 4. Should any failure occur during or after the warranty period, customer does not have the right to interrupt payment / price discount. 5. Incidental or consequential damages like inconvenience commercial loss, loss of tie, mental agony etc. 6. Loss of any nature due to operation or non-operation is not covered under warranty. 7. All free service are at Dealer's service point only. 8. Warranty ceases if service is not done periodically. 9. The attached card should be completed and returned to Ratnagiri Impex Pvt. Ltd. for registration immediately after sale / delivery. 10. The warranty is void unless you register the warranty card with Ratnagiri Impex Pvt. Ltd. 11. The decision of Ratnagiri Impex Pvt. Ltd., in settling the warranty is final in all respects. 12. All disputes are subject to Bangalore Courts Jurisdiction



1st service coupon

ISO 9001 : 2015 CERTIFIED COMPANY

	FREE SERVICE COUPON	(30DAYS/30HRS. WHICHE)	/ER IS EARLIER	
MODEL		SERIAL NUMBER		
PDI DATE	SERVICE NO.	PURCHASE BILL NO.	DATE	
DEALERS OFFICE SEAL			OPERATIONS	
	 Check and test the fuel mix Check , clean and adjust the Check and sparken the cutt Start and check the noise, v 	spark plug4. Cing tools6.F	heck and clean the air filter Check and adjust the carburetor tuning Product familirisation on usage Routine maintenance and shortage.	
	FREE SERVICE COUPON (30DAYS/30HRS. WHICHEV	ER IS EARLIER	
MODEL		SERIAL NUMBER		
MODEL PDI DATE	SERVICE NO.	PURCHASE BILL NO.	DATE	
DEALERS OFFICE SEAL		(DPERATIONS	
	 Check and test the fuel mixt Check , clean and adjust the Check and sparken the cutti Start and check the noise, vi 	spark plug4. Cing tools6.P	neck and clean the air filter Theck and adjust the carburetor tuning roduct familirisation on usage Routine maintenance and shortage.	
	FREE SERVICE COUPON (3	BODAYS/30HRS. WHICHEVE	R IS EARLIER	
MODEL PDI DATE	SERVICE NO.	SERIAL NUMBER PURCHASE BILL NO.	DATE	
DEALERS OFFICE SEAL	 Check and test the fuel mix Check , clean and adjust the Check and sparken the cutt Start and check the noise, w 	ture2. ce spark plug4. cting tools6.1	OPERATIONS check and clean the air filter Check and adjust the carburetor tuning Product familirisation on usage Routine maintenance and shortage.	



DONTS

- 1. Always read the instruction manual supplied along with the equipments and understand the correct installation and operating procedures before attempting to use the equipments.
- 2. It is important to use the personal protection equipments such as head helmet with visor, ear defenders, goggles, safety gloves, cut resistant shoes, trousers and jackets while operating potentially dangerous machines
- β. Avoid untrained persons using the equipments. Children must not be allowed to handle these equipments
- 4. Always use genuine spares and accessories in repairs and usage to derive maximum life of the equipments.
- 5. Always keep the equipments in good working condition to minimize loss of output as well as to reduce the pollution and save the environment
- 6.Do not use the machine within range of persons unless they wear protective clothing
- 7. Do not operate the machine when fatigued or under the influence of alcohol or drugs
- 8. When the machine is running, please maintain a constant water supply. Without water circulation will damage the sealing rings of the machine.
- 9. For more query kindly contact for our Service Center/Dealer/ franchise

