

## INTERCULTIVATOR/POWER WEEDER AM-MPT-1100-6D CHAMPION- 3 GEAR ENGINE DIAGRAM WITH PART LIST



DISCLAIMER : 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,

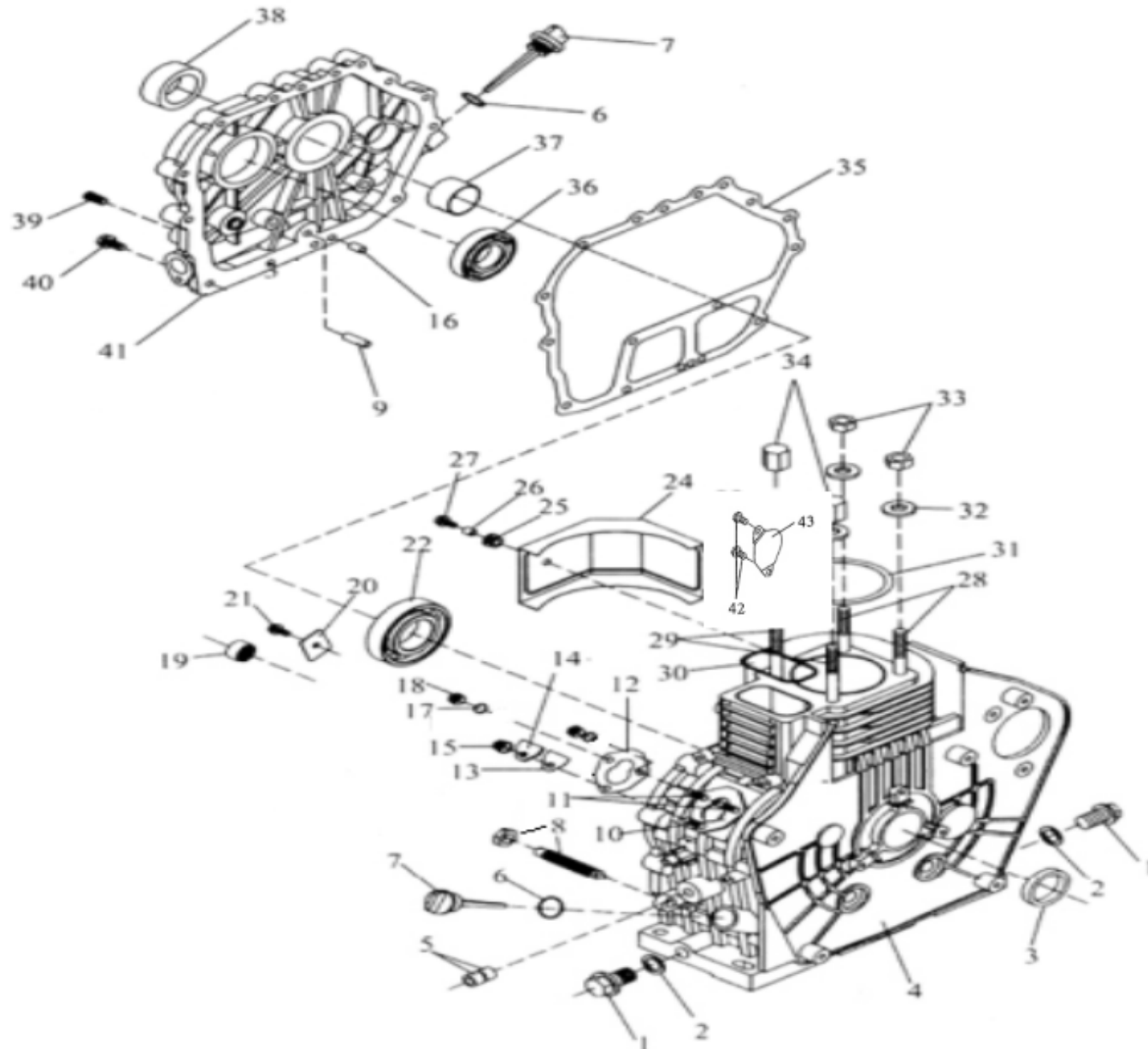
We import and market of high quality of agriculture wide range of equipments which we are selling through our authorised franchisee or dealer network. We are in this field from past years service the farmer. community. For further details, Please visit our website [www.agrimart.in](http://www.agrimart.in).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

## TECHNICAL PARAMETERS

MODEL	AM-MPT-1100-6D CHAMPION
STARTING	RECOIL
MODEL	AM-178FDR
DISPLACEMENT	296CC
FUEL TANK CAPACITY	3.5LTR
TRANMISSION OIL CAPACITY	2.2LTR
GEAR	2 FORWARD + 1 REVERSE
TILLING DEPTH	≥100MM
TILLING DEPTH	850-1150 MM
NW/GW	115/125

# ENGINE DIAGRAM & SPARE PARTS LIST OF AM-MPT-6D CHAMPION

## ENGINE BODY - A



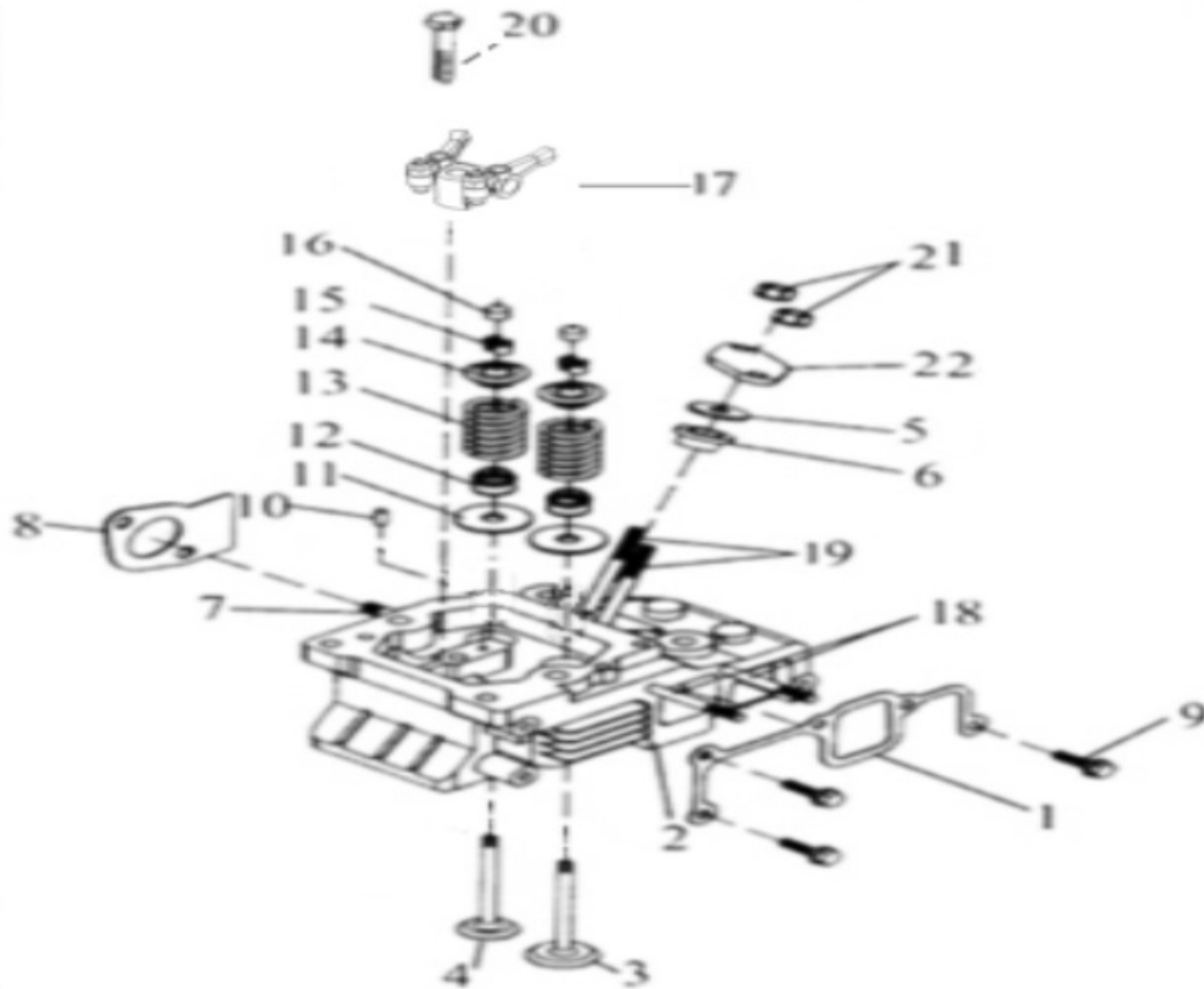
# ENGINE DIAGRAM & SPARE PARTS LIST OF AM-MPT-6D CHAMPION

SL NO	PART NO	DESCRIPTION	SL NO	PART NO	DESCRIPTION
1	AM178DFR-EA01	OIL DRAIN PLUG	17	AM178DFR-EA17	SPRING WASHER
2	AM178DFR-EA02	GASKET	18	AM178DFR-EA18	NUT
3	AM178DFR-EA03	OIL SEAL	19	AM178DFR-EA19	DEEP GROOVE BALL BEARING
4	AM178DFR-EA04	ENGINE BODY	20	AM178DFR-EA20	NEEDLE BEARING
5	AM178DFR-EA05	NEEDLE BEARING	21	AM178DFR-EA21	THRUST PLATE
6	AM178DFR-EA06	O RING SEAL	22	AM178DFR-EA22	BOLT
7	AM178DFR-EA07	OIL DIPSTICK	23	AM178FDR-EA23	SHOCK ABSORBER
8	AM178DFR-EA08	OIL MEASURER	24	AM178FDR-EA24	BLOWER PLATE
9	AM178DFR-EA09	OIL GUIDING PIPE	25	AM178FDR-EA25	SHOCK BLOCK
10	AM178DFR-EA10	FUEL INJECTION PUMP 'STUD(SHORT)	26	AM178FDR-EA26	BLOWER PLATE BUSH
11	AM178DFR-EA11	FUEL INJECTION PUMP STUD(LONG)	27	AM178FDR-EA27	BOLT AND WAHSER
12	AM178DFR-EA12	FUEL INJECTION PUMP WASHER	28	AM178FDR-EA28	CYLINDER HEAD 'STUD(SHORT)
13	AM178DFR-EA13	SEAL PLATE WASHER	29	AM178FDR-EA29	CYLINDER HEAD 'STUD(LONG)
14	AM178DFR-EA14	SEALPLATE	30	AM178FDR-EA30	GASKET☐RECTANGLE☐
15	AM178DFR-EA15	NUT	31	AM178FDR-EA31	CYLINDER COVER GASKET
16	AM178DFR-EA16	ROUND PIN	32	AM178FDR-EA32	CYLINDER HEAD WASHER



# ENGINE DIAGRAM & SPARE PARTS LIST OF AM-MPT-6D CHAMPION

## CYLINDER HEAD ASSY - B



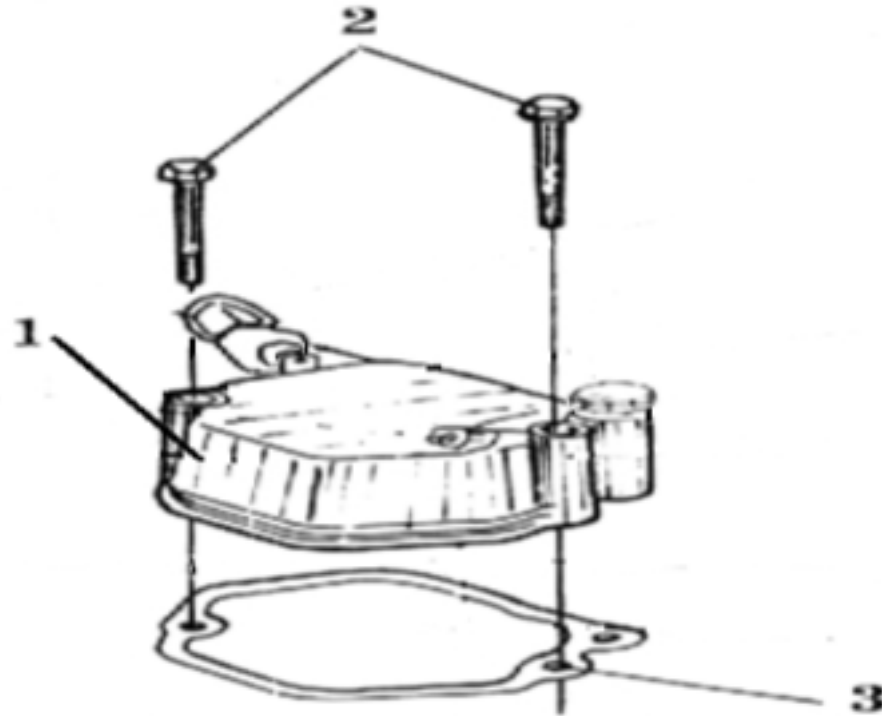
# ENGINE DIAGRAM & SPARE PARTS LIST OF AM-MPT-6D CHAMPION

SL NO	PART NO	DESCRIPTION	SL NO	PART NO	DESCRIPTION
1	AM178FDR-EB01	INLET PIPE 'GASKET	17	AM178FDR-EB17	VALVE ROCKER ARM SEAT ASSY
2	AM178FDR-EB02	CYLINDER HEAD SUBASSY.	18	AM178FDR-EB18	CYLINDER HEAD 'STUD
3	AM178FDR-EB03	INLET VALVE	19	AM178FDR-EB19	CYLINDER HEAD 'STUD
4	AM178FDR-EB04	OUTLET VALVE	20	AM178FDR-EB20	BOLT
5	AM178FDR-EB05	WASHER OF INJECT PUMP	21	AM178FDR-EB21	NUT
6	AM178FDR-EB06	LAGGING SLEEVE	22	AM178FDR-EB22	INJECTION PUMP PRESSURE LINE BOARD
7	AM178FDR-EB07	STUD			
8	AM178FDR-EB08	OUTLET PIPE 'GASKET			
9	AM178FDR-EB09	HEXAGON NUT WITH FLANGE			
10	AM178FDR-EB10	ROUND PIN			
11	AM178FDR-EB11	WASHER			
12	AM178FDR-EB12	OIL SEAL			
13	AM178FDR-EB13	INLET VALVE SPRING			
14	AM178FDR-EB14	INLET VALVE 'SPRING SEAT			
15	AM178FDR-EB15	VALVE CLAMP			
16	AM178FDR-EB16	VALVE ADJUSTING PAD			



# ENGINE DIAGRAM & SPARE PARTS LIST OF AM-MPT-6D CHAMPION

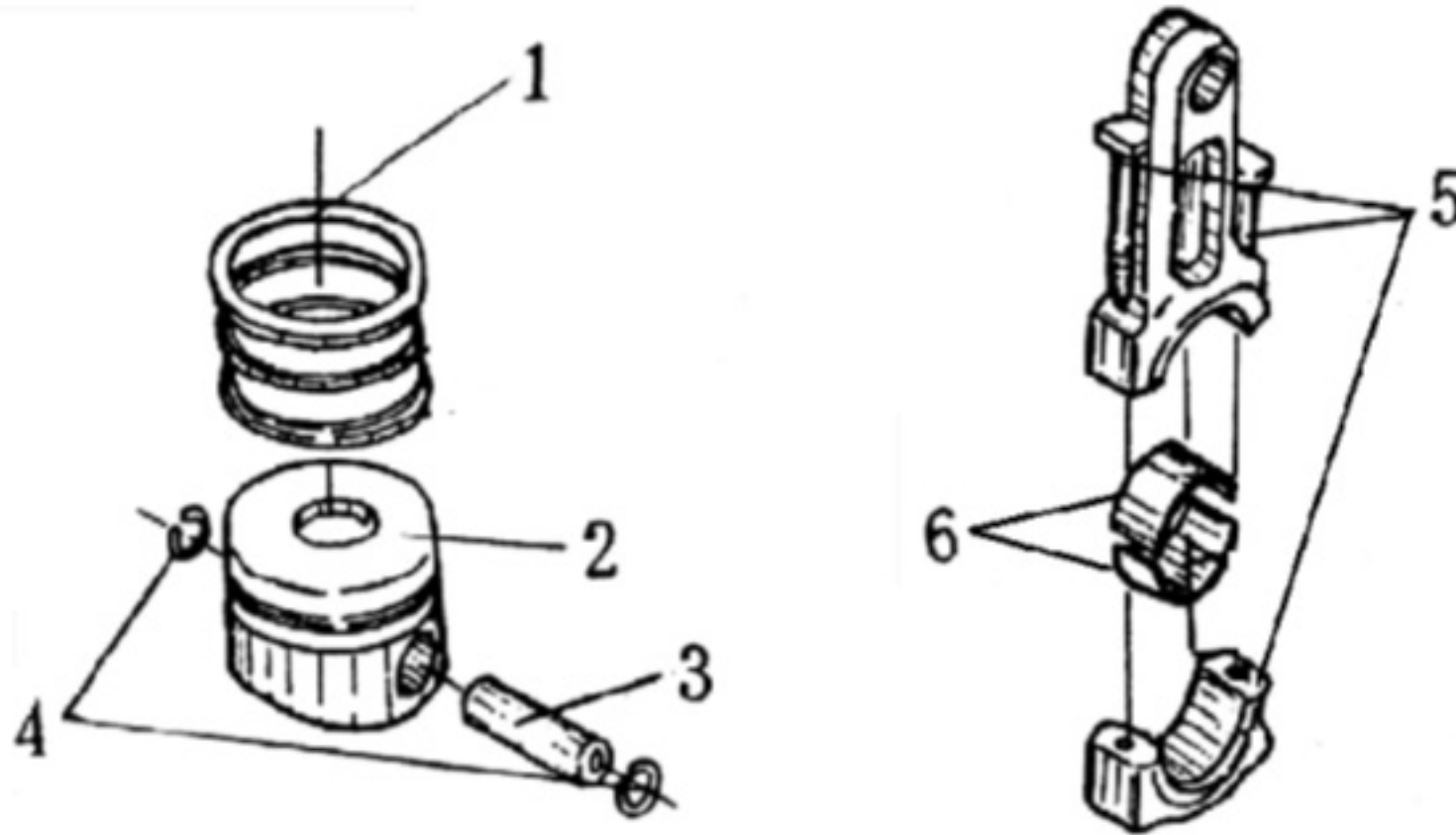
## CYLINDER HEAD COVER -C



SL NO	PART NO	DESCRIPTION
1	AM178FDR-EC01	CYLINDER HEAD COVER SUBASSY
2	AM178FDR-EC02	BOLT
3	AM178FDR-EC03	CYLINDER HEAD COVER GASKET

# ENGINE DIAGRAM & SPARE PARTS LIST OF AM-MPT-6D CHAMPION

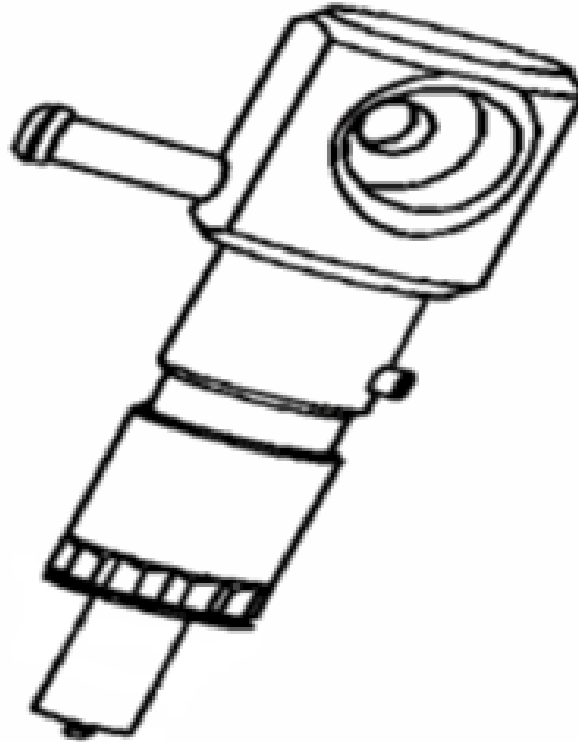
## PISTON ASSY - D



SL NO	PART NO	DESCRIPTION	SL NO	PART NO	DESCRIPTION
1	AM178FDR-ED01	PISTON RING SETS	4	AM178FDR-ED04	SPRING CIRCLIP
2	AM178FDR-ED02	PISTON	5	AM178FDR-ED05	CONNECTING ROD SUBASSY
3	AM178FDR-ED03	PISTON PIN	6	AM178FDR-ED06	CONNECTING ROD SHAFT

# ENGINE DIAGRAM & SPARE PARTS LIST OF AM-MPT-6D CHAMPION

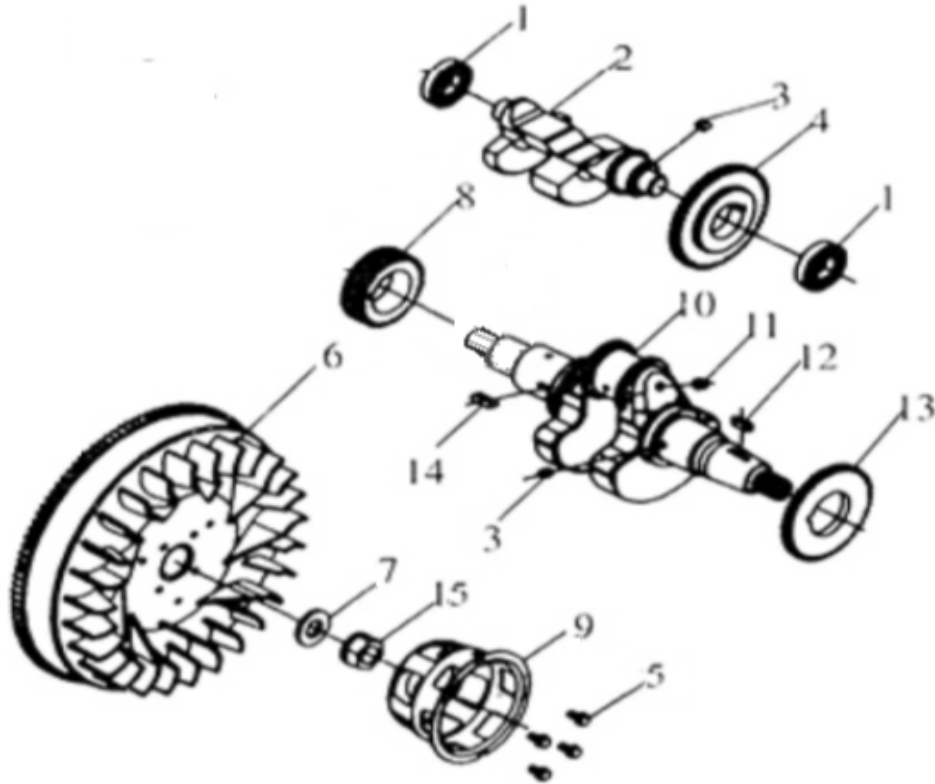
## INJECTOR ASSY - E



SL NO	PART NO	DESCRIPTION
1	AM178FDR-EE01	INJECTOR ASSY

# ENGINE DIAGRAM & SPARE PARTS LIST OF AM-MPT-6D CHAMPION

## CRANKSHAFT AND FLYWHEEL ASSY- F

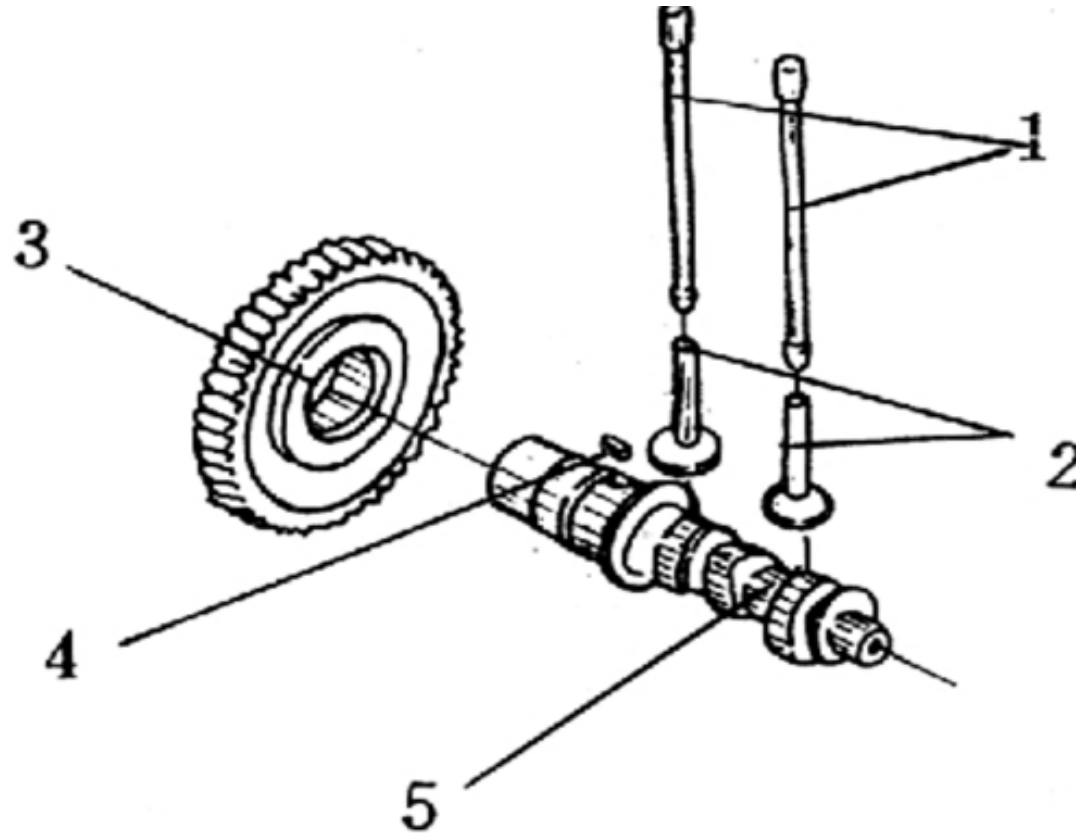


SL NO	PART NO	DESCRIPTION
1	AM178FDR-EF01	DEEP GROOVE BEARING
2	AM178FDR-EF02	BALANCE SHAFT
3	AM178FDR-EF03	FLAT KEY
4	AM178FDR-EF04	BALANCE SHAFT 'TIMING GEAR
5	AM178FDR-EF05	HEXAGON BOLT WITH FLANGE
6	AM178FDR-EF06	FLYWHEEL
7	AM178FDR-EF07	FLYWHEEL NUT WASHER
8	AM178FDR-EF08	CRANKSHAFT 'TIMING GEAR
9	AM178FDR-EF09	STARTING RATCHET REEL
10	AM178FDR-EF10	CRANKSHAFT
11	AM178FDR-EF11	STEEL BALL
12	AM178FDR-EF12	KEY
13	AM178FDR-EF13	DRIVING GEAR,BALANCE SHAFT
14	AM178FDR-EF14	KEY
15	AM178FDR-EF15	FLYWHEEL NUT



# ENGINE DIAGRAM & SPARE PARTS LIST OF AM-MPT-6D CHAMPION

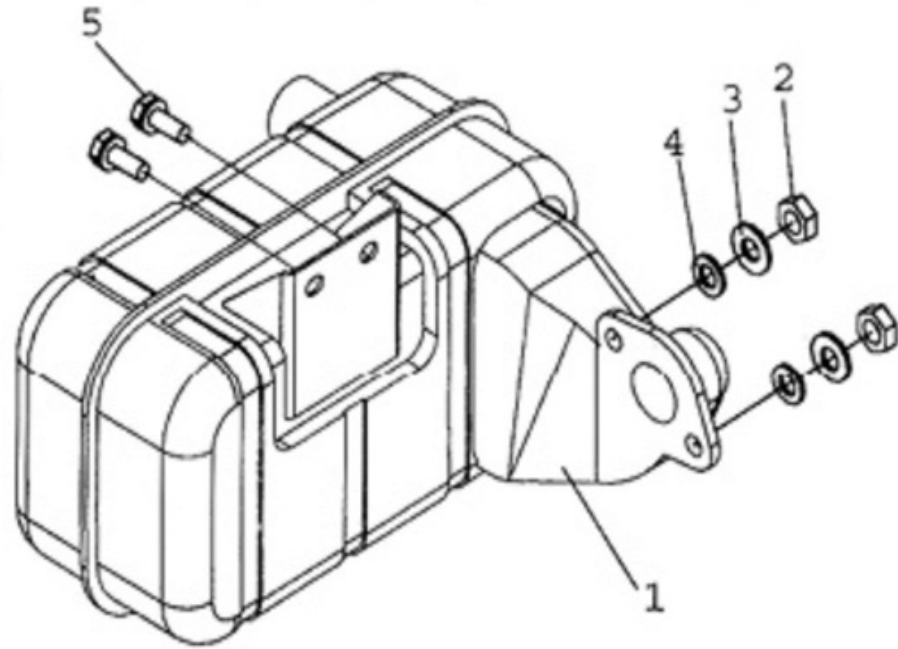
## CAMSHAFT ASSY - H



SL NO	PART NO	DESCRIPTION	SL NO	PART NO	DESCRIPTION
1	AM178FDR-EH01	VALVE PUSH ROD SUBASSY		AM178FDR-EH04	FLAT KEY
2	AM178FDR-EH02	VALVE TAPET		AM178FDR-EH05	CAMHAFT
3	AM178FDR-EH03	CAMSHAFT TIMING GEAR			

# ENGINE DIAGRAM & SPARE PARTS LIST OF AM-MPT-6D CHAMPION

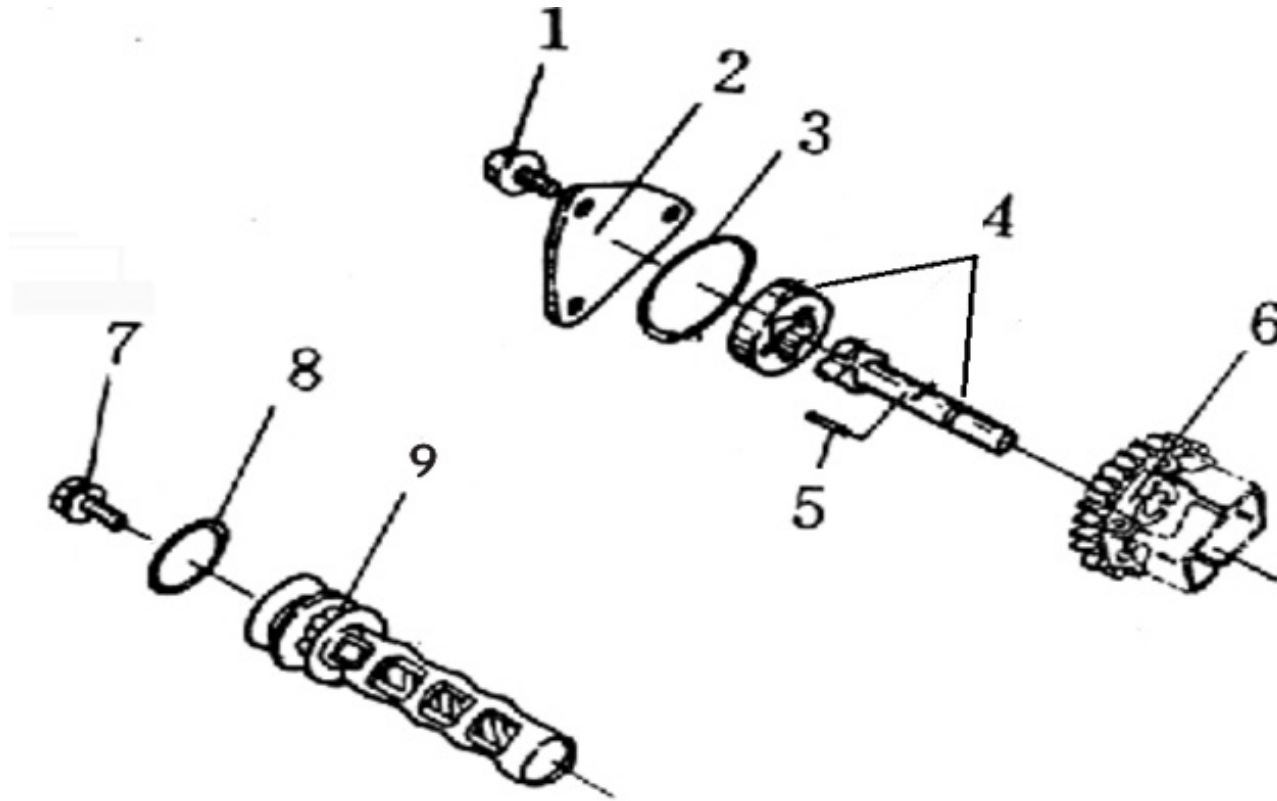
## MUFFLER ASSY - J



SL NO	PART NO	DESCRIPTION	SL NO	PART NO	DESCRIPTION
1	AM178FDR-EJ01	MUFFLER SUBASSY	4	AM178FDR-EJ04	WASHER
2	AM178FDR-EJ02	NUT	5	AM178FDR-EJ05	HEXAGON BOLT WITH FLANGE
3	AM178FDR-EJ03	SPRING WASHER			

# ENGINE DIAGRAM & SPARE PARTS LIST OF AM-MPT-6D CHAMPION

## LUBRICATION SYSTEM - K

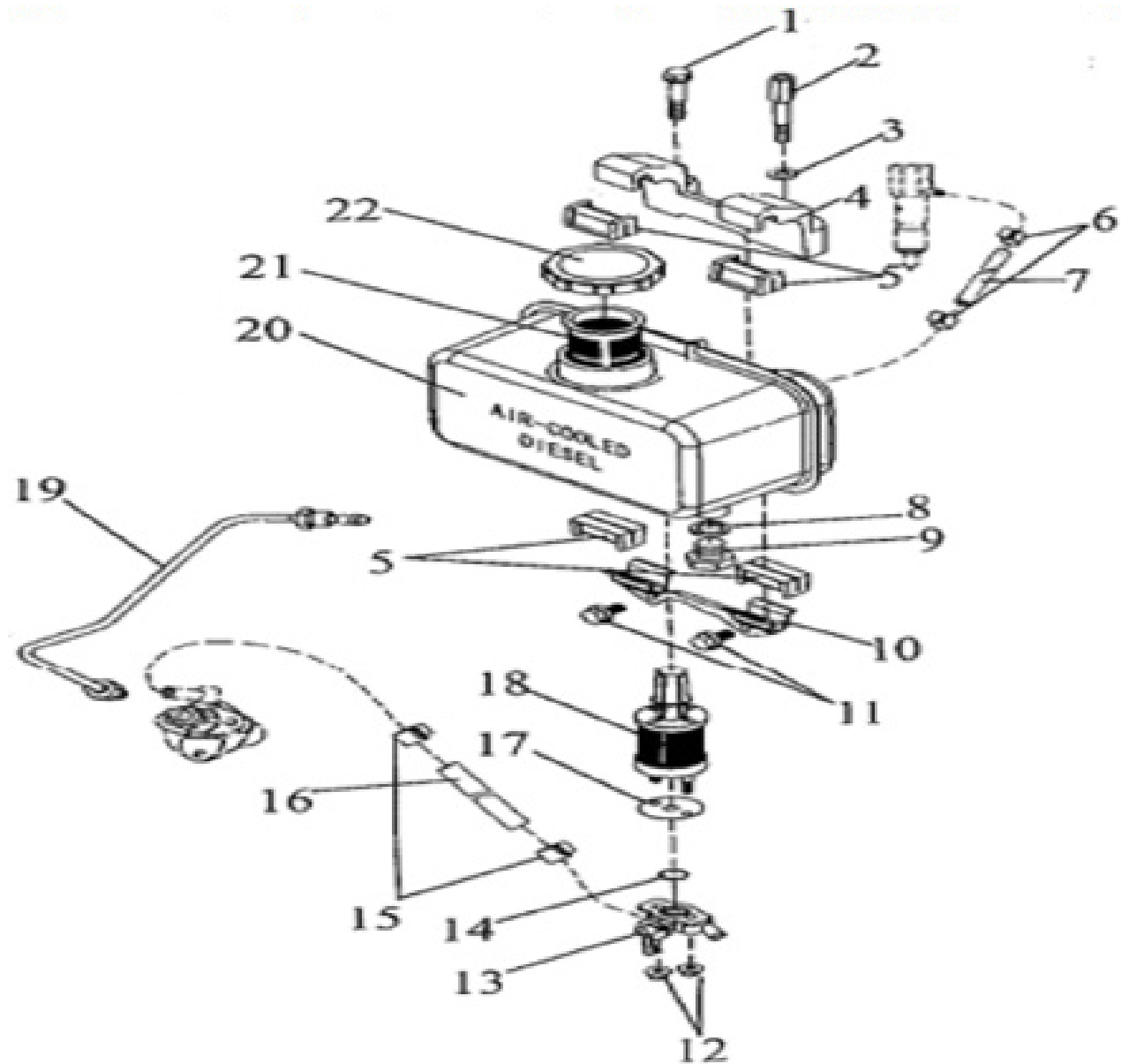


SL NO	PART NO	DESCRIPTION	SL NO	PART NO	DESCRIPTION
1	AM178FDR-EK01	HEXAGON BOLT WITH FLANGE	6	AM178FDR-EK06	OIL PUMP DRIVIN GEAR SUBASSY
2	AM178FDR-EK02	OIL PUMP COVER PLATE	7	AM178FDR-EK07	HEXAGON NUT WITH FLANGE
3	AM178FDR-EK03	O-RING SEAL	8	AM178FDR-EK08	O-RING SEAL
4	AM178FDR-EK04	OIL PUMP SUBASSY	9	AM178FDR-EK09	OIL FILTER SUBASSY
5	AM178FDR-EK05	ROUND PIN			



# ENGINE DIAGRAM & SPARE PARTS LIST OF AM-MPT-6D CHAMPION

## FUEL SYSTEM-L

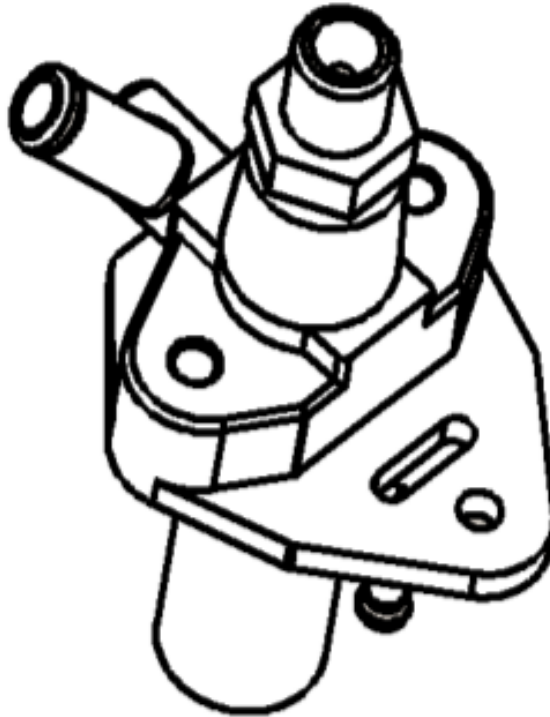


# ENGINE DIAGRAM & SPARE PARTS LIST OF AM-MPT-6D CHAMPION

SL NO	PART NO	DESCRIPTION	SL NO	PART NO	DESCRIPTION
1	AM178FDR-EL01	ROCKER ARM SEAT BOLT	17	AM178FDR-EL17	FULE FILTER GASKET
2	AM178FDR-EL02	FUEL TANK BRACKET BOLT	18	AM178FDR-EL18	FUEL FITLER ELEMENT SUBASSY
3	AM178FDR-EL03	WASHER	19	AM178FDR-EL19	HIGH PRESSURE PIPE SUBASSY
4	AM178FDR-EL04	FUEL TANK UPPER BRACKET	20	AM178FDR-EL20	FUEL TANK WELDING PART
5	AM178FDR-EL05	SHOCK PAD	21	AM178FDR-EL21	FUEL FITLER STRAINER
6	AM178FDR-EL06	OIL RETURN PIPE CLAMP	22	AM178FDR-EL22	FUEL CAP
7	AM178FDR-EL07	OIL RETURN PIPE			
8	AM178FDR-EL08	WASHER			
9	AM178FDR-EL09	BOLT			
10	AM178FDR-EL10	FUEL TANK LOWER BRACKET			
11	AM178FDR-EL11	BOLT			
12	AM178FDR-EL12	HEXAGON NUT WITH FLANGE			
13	AM178FDR-EL13	FUEL TANK 'ON/OFF SWITCH BODY			
14	AM178FDR-EL14	WASHER FOR ON/OFF SWITCH			
15	AM178FDR-EL15	INLET PIPE CLAMP			
16	AM178FDR-EL16	INLET PIPE			

# ENGINE DIAGRAM & SPARE PARTS LIST OF AM-MPT-6D CHAMPION

## INJECT PUMP ASSY - M

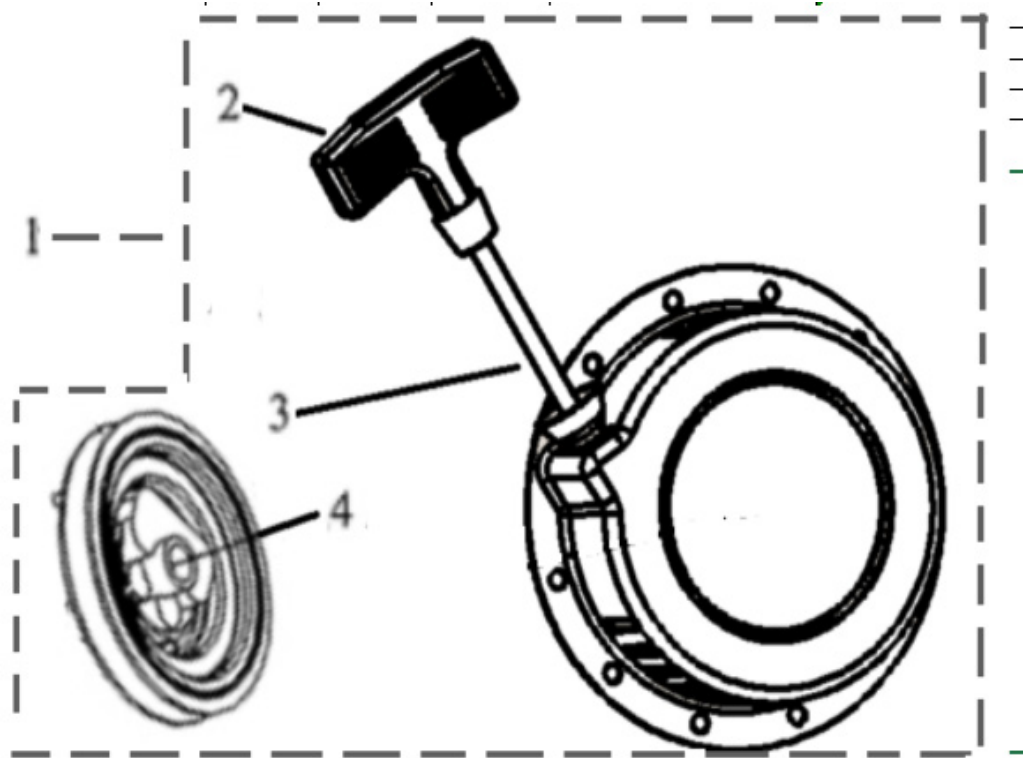


SL NO	PART NO	DESCRIPTION
1	AM178FDR-EM01	FULE INJECTION PUMP



# ENGINE DIAGRAM & SPARE PARTS LIST OF AM-MPT-6D CHAMPION

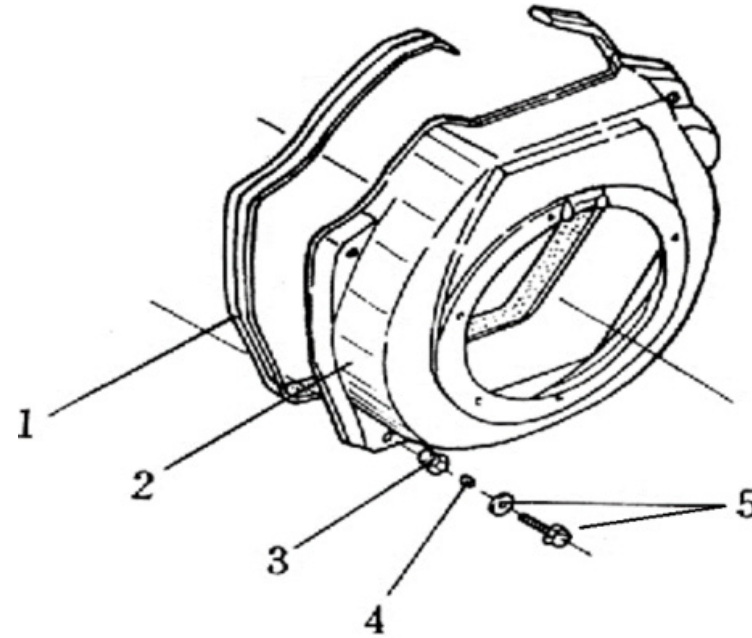
## RECOIL STARTER - P



SL NO	PART NO	DESCRIPTION
1	AM178FDR-EP01	RECOIL STARTER ASSY
2	AM178FDR-EP02	STARTING HANDLE
3	AM178FDR-EP03	STARTING ROPE
4	AM178FDR-EP04	RECOIL START PLATE

# ENGINE DIAGRAM & SPARE PARTS LIST OF AM-MPT-6D CHAMPION

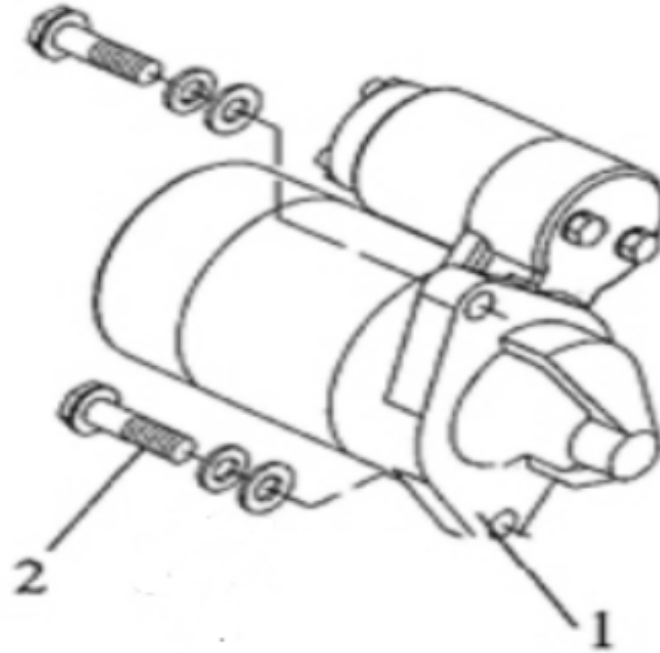
## SHROUD ASSY - Q



SL NO	PART NO	DESCRIPTION
1	AM178FDR-EQ01	SEAL STRIP
2	AM178FDR-EQ02	SHROUD
3	AM178FDR-EQ03	SHOCK ABSORBING CUSHION
4	AM178FDR-EQ04	SHEATH
5	AM178FDR-EQ05	BOLT AND WASHER ASSY

# ENGINE DIAGRAM & SPARE PARTS LIST OF AM-MPT-6D CHAMPION

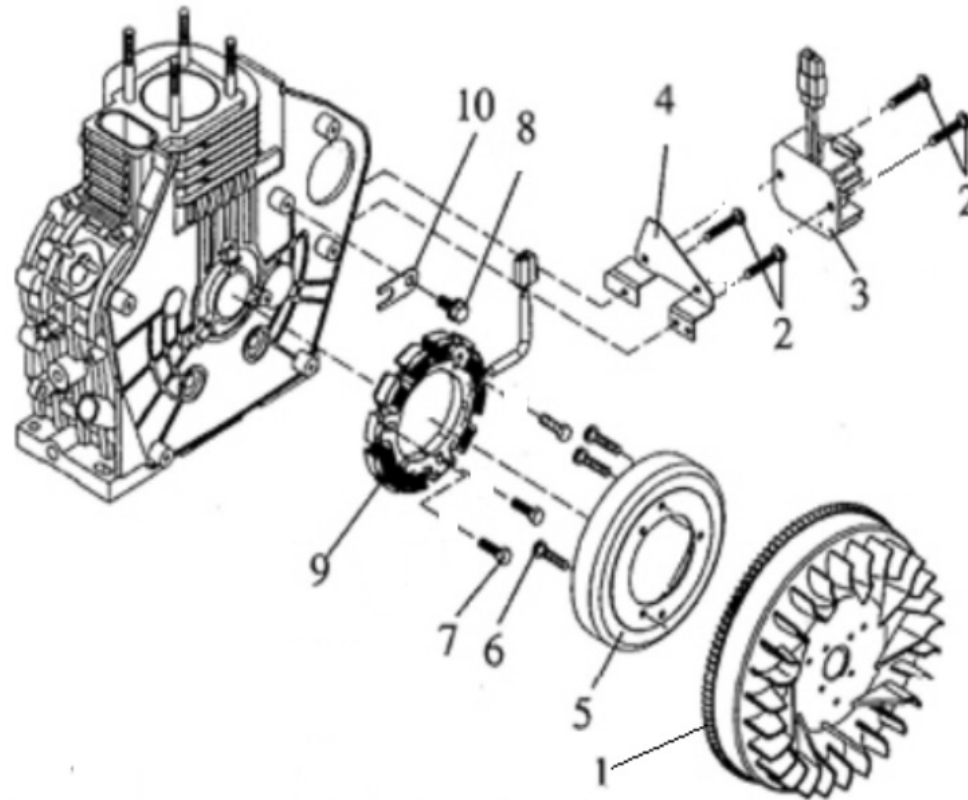
## MOTOR STARTER ASSY - R



SL NO	PART NO	DESCRIPTION
1	AM178FDR-ER01	MORTOR STARTER
2	AM178FDR-ER02	BOLT

# ENGINE DIAGRAM & SPARE PARTS LIST OF AM-MPT-6D CHAMPION

## FLY WHEEL AND ALTERNATOR ASSY - S








SL NO	PART NO	DESCRIPTION	SL NO	PART NO	DESCRIPTION
1	AM178FDR-ES01	FLY WHEEL TEETH RING	6	AM178FDR-ES06	SCREW
2	AM178FDR-ES02	BOLT	7	AM178FDR-ES07	BOLT
3	AM178FDR-ES03	VOLT REGULATOR	8	AM178FDR-ES08	BOLT
4	AM178FDR-ES04	VOLT REGULATOR BRACKET	9	AM178FDR-ES09	STATOR
5	AM178FDR-ES05	ROTOR	10	AM178FDR-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 terms and conditions of warranty as in the warranty card

## DEALERS 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 terms and conditions of warranty as in the warranty card

## COMPANY 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 terms and conditions of warranty as in the warranty 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-imburement. 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-imburement. 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-imburement. 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



**FREE SERVICE COUPON (30DAYS/30HRS. WHICHEVER IS EARLIER)**

MODEL

SERIAL NUMBER

PDI DATE

SERVICE NO.

PURCHASE BILL NO.

DATE

DEALERS OFFICE SEAL

- 1. Check and test the fuel mixture
- 3. Check , clean and adjust the spark plug
- 5. Check and sparken the cutting tools
- 7. Start and check the noise, vibration, loosen etc..

OPERATIONS

- 2. check and clean the air filter
- 4. Check and adjust the carburetor tuning
- 6. Product familirisation on usage
- 8. Routine maintenance and shortage.

**FREE SERVICE COUPON (30DAYS/30HRS. WHICHEVER IS EARLIER)**

MODEL

SERIAL NUMBER

PDI DATE

SERVICE NO.

PURCHASE BILL NO.

DATE

DEALERS OFFICE SEAL

- 1. Check and test the fuel mixture
- 3. Check , clean and adjust the spark plug
- 5. Check and sparken the cutting tools
- 7. Start and check the noise, vibration, loosen etc..

OPERATIONS

- 2. check and clean the air filter
- 4. Check and adjust the carburetor tuning
- 6. Product familirisation on usage
- 8. Routine maintenance and shortage.

**FREE SERVICE COUPON (30DAYS/30HRS. WHICHEVER IS EARLIER)**

MODEL

SERIAL NUMBER

PDI DATE

SERVICE NO.

PURCHASE BILL NO.

DATE

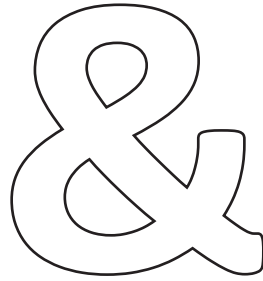
DEALERS OFFICE SEAL

- 1. Check and test the fuel mixture
- 3. Check , clean and adjust the spark plug
- 5. Check and sparken the cutting tools
- 7. Start and check the noise, vibration, loosen etc..

OPERATIONS

- 2. check and clean the air filter
- 4. Check and adjust the carburetor tuning
- 6. Product familirisation on usage
- 8. Routine maintenance and shortage.

# DOS

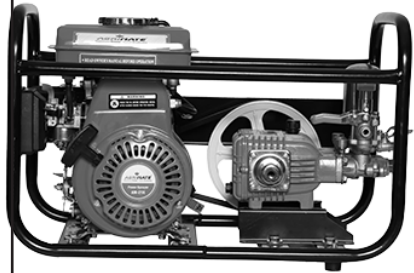
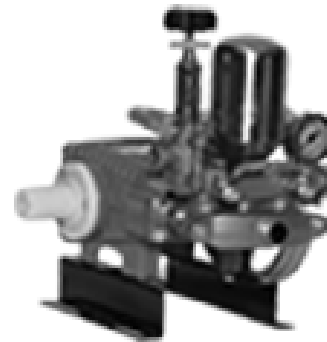


# DONT'S

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
3. 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

# Agrimate Army For Pest Control

ANY WHERE - ANY TIME - ANY CROP



Marketed by:  
**ratnagiri  
impex**  
BRINGING YOU THE FUTURE... NOW

**RATNAGIRI IMPEX PVT., LTD.,**

Annapurna House, #1 / 1G, 7th Cross, New  
Guddadahalli

Mysore Road, Bangalore - 560 026

Missed Call : 7393 938 938

Email: [ask@agrimart.in](mailto:ask@agrimart.in)