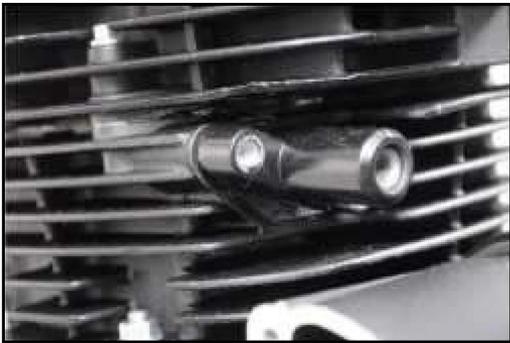
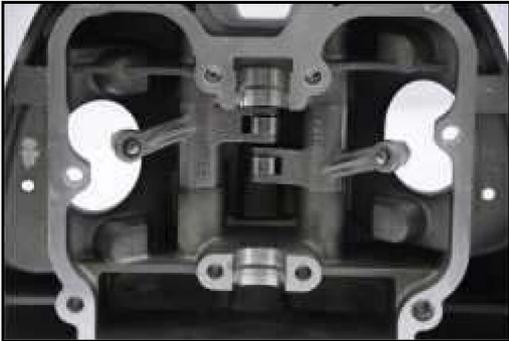


S. No.	Aggregate to Assemble / Instructions	Fastener, Size, Tool Usage, Precautions, Photos
<p>31.</p>	<p>Auto chain tensioner</p> <ul style="list-style-type: none"> ■ Remove hex bolt with spring from the center of auto chain tensioner body. ■ Remove 2 hex socket head screws & gently pull out auto chain tensioner assembly. ■ Remove gasket. 	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p>Hex flange bolt: M8 Hex Socket: 12mm</p> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p>CAUTION: Open slowly & carefully since spring loaded bolt.</p> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p>NOTE: Ensure 'O' ring is removed from housing.</p> </div> <div style="border: 1px solid black; padding: 5px;"> <p>Hex Socket Hd screw: M6 X 25 Allen Key: M5</p> </div> <div style="text-align: right;">    </div>
<p>32.</p>	<p>Inlet manifold</p> <ul style="list-style-type: none"> ■ Remove 2 hex socket head screws. ■ Remove inlet manifold with "O" ring 	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p>Hex Socket HdScrew: M6X25 Allen key: M5</p> </div> <div style="text-align: right;">  </div>

S. No.	Aggregate to Assemble / Instructions	Fastener, Size, Tool Usage, Precautions, Photos	
33.	<p>Cover- Cam Center</p> <ul style="list-style-type: none"> Remove 2 hex flange bolts & remove cover 	<p>Hex flange bolts: M6 X 16 Hex Socket: 8mm</p>	
34.	<p>Plug - Camshaft Hole</p> <ul style="list-style-type: none"> Remove hex flange bolt. Rotate plug clockwise gently. DO NOT ATTEMPT to remove plug forcefully from the cylinder head cover. 	<p>Hex flange bolt: M6 X 16 Hex Socket: 8mm</p> <p>NOTE: The plug will be tight in cylinder head cover. Do not attempt to remove before loosening all the cylinder head cover bolts.</p>	 
35.	<p>Tappet cover inlet</p> <ul style="list-style-type: none"> Remove 2 hex flange bolts & remove cover with O ring. 	<p>Hex flange bolts: M6X21 Hex Socket: 8mm</p>	

S. No.	Aggregate to Assemble / Instructions	Fastener, Size, Tool Usage, Precautions, Photos	
36.	<p>Tappet cover exhaust</p> <ul style="list-style-type: none"> Remove 2 hex flange bolts & remove cover with O ring. 	<p>Hex flange bolts: M6X21 Hex Socket: 8mm</p>	
37.	<p>Plugs rocker shafts</p> <ul style="list-style-type: none"> Loosen 2 hex socket head plugs from cylinder head cover RH side. (Do not remove plugs fully) 	<p>Hex Socket plug: M14 X 12 Allen key: M8</p>	
38.	<p>Cylinder head cover</p> <ul style="list-style-type: none"> Remove 2 long hex flange bolts with aluminum washers from the top RH side. Remove 3 long hex flange bolts from the top LH side 	<p>Hex flange bolt: M6 X 60 Hex Socket: 8mm</p> <p>NOTE: Aluminum washers are provided to prevent oil leak through the bolts.</p> <p>Hex flange bolt: M6 X 60 Hex Socket: 8mm</p>	 

S. No.	Aggregate to Assemble / Instructions	Fastener, Size, Tool Usage, Precautions, Photos	
38.	<p>Cylinder head cover</p> <ul style="list-style-type: none"> ■ Remove 3 medium Hex flange bolts from the LH side. ■ Remove 2 long Hex flange bolts from RH side. ■ Remove 2 fully threaded Hex flange bolts from inlet & Exhaust tappets opening. 	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> <p>Hex bolt: M6X55Hex Socket: 8mm</p> </div>	
		<div style="border: 1px solid black; padding: 5px; width: fit-content;"> <p>Hex flange bolt: M6 X 40 EX Hex flange bolt: M6 X 45 IN Hex Socket: 8mm</p> </div>	
		<div style="border: 1px solid black; padding: 5px; width: fit-content;"> <p>Hex bolt: M6X16 Hex Socket: 8mm</p> </div>	
39.	<p>Plug camshaft hole</p> <ul style="list-style-type: none"> ■ Remove small cam shaft cover. 		

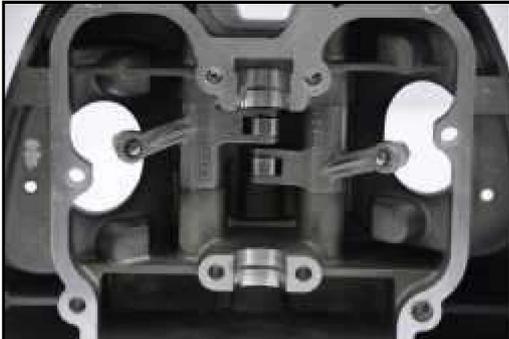
S. No.	Aggregate to Assemble / Instructions	Fastener, Size, Tool Usage, Precautions, Photos
40.	<p>Cylinder head cover</p> <ul style="list-style-type: none"> Remove cylinder head cover by gently tapping on the pegs provided. 	
41.	<p>Rocker Shaft Plug screws</p> <ul style="list-style-type: none"> Remove the 2 hexsocket plug screws (Loosened earlier) with their copper washers from the cylinder head cover. 	
42.	<p>Shaft - Rocker arms</p> <ul style="list-style-type: none"> Locate 2 long suitable M8 hex screws into the rocker shaft threads & pull out the shafts. 	<div data-bbox="600 1171 943 1256" style="border: 1px solid black; padding: 5px; width: fit-content;"> <p>Hex flange bolts: M8 Hex Socket: 10mm</p> </div> 
43.	<p>Rocker arms</p> <ul style="list-style-type: none"> Remove inlet & exhaust rocker arms. 	

S. No.	Aggregate to Assemble / Instructions	Fastener, Size, Tool Usage, Precautions, Photos
44.	<p>Spark plug</p> <ul style="list-style-type: none"> Remove spark plug from cylinder head. 	<div data-bbox="603 376 944 465" style="border: 1px solid black; padding: 5px;"> <p>Spark plug M10 Deep Hex Socket 16mm</p> </div> <div data-bbox="1107 367 1471 707" style="float: right;">  </div>
45.	<p>Cam shaft assembly</p> <ul style="list-style-type: none"> Rotate cam shaft such that the half lock washer will come up from the cylinder head slot. Remove the half washer. Rotate Cam shaft if necessary such that One hex bolt can be accessed for loosening. Straighten lock tab & remove 1st hex bolt. 	<div data-bbox="960 766 1471 1106" style="float: right;">  </div> <div data-bbox="960 1160 1471 1500" style="float: right;">  </div> <div data-bbox="603 1576 944 1666" style="border: 1px solid black; padding: 5px; margin-top: 20px;"> <p>Hex bolt: M6 X 12 Hex Socket: 10mm</p> </div> <div data-bbox="960 1568 1471 1908" style="float: right; margin-top: 20px;">  </div>

S. No.	Aggregate to Assemble / Instructions	Fastener, Size, Tool Usage, Precautions, Photos	
25.	<p>Cylinder Head Assembly</p> <ul style="list-style-type: none"> ■ Locate 4 special Hex bolts with washer & tighten diagonally. ■ Locate 2 Hex flange bolts on cylinder head LH side and tighten. 	<p>Special Hex Bolts: M10X170 Hex Socket: 12mm Torque: 4-4.5KgM (40-45Nm)</p> <p>Hex flange bolts: M6X30 D E Spanner: 8mm Torque: 0.8-1.2KgM (8-12Nm)</p>	 
26.	<p>Cam Chain & Sprocket Assembly</p> <ul style="list-style-type: none"> ■ Locate cam shaft along with sprocket on cylinder head. ■ Ensure sprocket is free on cam shaft & locate chain on sprocket with marking "T" on sprocket facing up. ■ Rotate cam shaft, without disturbing the sprocket till the dowel in the shaft aligns with the hole in the sprocket. ■ Ensure chain has no slack & insert cam shaft into sprocket such that the dowel locates into the sprocket. 	<p>NOTE:</p> <p>Ensure Key way in crankshaft is facing up so that piston is at TDC on compression stroke.</p> <p>CAUTION:</p> <ul style="list-style-type: none"> - Ensure reference lines on cam sprocket & cam shaft are parallel & aligned. - Crankshaft keyway is at TDC position. 	 

S. No.	Aggregate to Assemble / Instructions	Fastener, Size, Tool Usage, Precautions, Photos	
26.	<p>Cam Chain & Sprocket Assembly</p> <ul style="list-style-type: none"> ■ Fix 1 hex bolt with lock plate on sprocket & tighten just sufficiently. ■ Rotate camshaft slowly & tighten 2nd Hex bolt, through the lock plate. ■ Tighten both bolts & bend lock plate over the bolts. 	<div data-bbox="603 770 948 931" style="border: 1px solid black; padding: 5px;"> <p>Hex Bolt: M6X12 Hex Socket: 8 mm Torque: 1-1.2KgM (10-12Nm)</p> </div>	 
27.	<p>Cam Shaft Lock "C" washer.</p> <ul style="list-style-type: none"> ■ Align slot in cam shaft with the groove in cylinder head. ■ Insert "C" washer into cylinder head to lock axial movement of the cam shaft 	<div data-bbox="603 1160 948 1420" style="border: 1px solid black; padding: 5px;"> <p>NOTE: Ensure "C" washer is located correctly into the slot in cylinder head failing which the cylinder head cover cannot seat properly</p> </div>	
28.	<p>Auto Chain Tensioner Assembly</p> <ul style="list-style-type: none"> ■ Ensure center bolt with spring is removed from assembly. ■ Release lock on chain tensioner body & depress pad completely. 	<div data-bbox="603 1563 948 1742" style="border: 1px solid black; padding: 5px;"> <p>NOTE: Ensure gasket is assembled on the Auto chain tensioner Assembly.</p> </div>	

S. No.	Aggregate to Assemble / Instructions	Fastener, Size, Tool Usage, Precautions, Photos
28.	<p>Auto Chain Tensioner Assembly</p> <ul style="list-style-type: none"> ■ Locate chain tensioner assembly in cylinder barrel & tighten with 2 Hex socket head screws. ■ Locate 'O' ring in the chain tensioner body. ■ Insert spring into chain tensioner and tighten with special Hex bolt. 	<p>NOTE: Ensure lock in chain tensioner assembly is facing downwards</p> <p>Hex Socket Hd Screw: M6X25 Allen Key: 5mm Torque: 1-1.2KgM (10-12Nm)</p> <p>Special Hex bolt: M8 Hex socket: 10mm Torque: 0.8-1.0KgM (8-10Nm)</p>  
29.	<p>Spark Plug</p> <ul style="list-style-type: none"> ■ Assemble spark plug on cylinder head. 	<p>NOTE: Ensurespark plug gap is set 0.7 - 0.8 mm</p> <p>Socket Spanner: 16mm Torque: 1-1.5KgM (10-15Nm)</p> 
30.	<p>Inlet Manifold</p> <ul style="list-style-type: none"> ■ Assemble Inlet manifold with the PAV inlet nipple facing downwards. ■ Tighten with 2 Hex socket head screws with copper washers. 	<p>NOTE: Ensure 'O' ring is located in the Inlet manifold.</p> <p>Hex Socket Hd screw: M6X25 Allen key: 5mm Torque: 0.8-1.2KgM (8-12Nm)</p> 

S. No.	Aggregate to Assemble / Instructions	Fastener, Size, Tool Usage, Precautions, Photos
31.	<p>Inlet Rocker arm & shaft in Cylinder head cover</p> <ul style="list-style-type: none"> ■ Position inlet rocker arm inside cover such that the tappet adjustment screw on the rocker arm is facing outside & roller is facing inside. ■ Assemble rocker shaft in the cylinder head cover such that the slot and the internal threads in the shaft are facing outside. ■ Ensure the slot in the rocker shaft is perpendicular to the top mounting hole in the cylinder head cover such that the cover mounting bolt can pass through the slot in the rocker shaft. 	  
32.	<p>Exhaust Rocker arm & shaft in Cylinder head cover</p> <ul style="list-style-type: none"> ■ Position exhaust rocker arm inside cover such that the tappet adjustment screw on the rocker arm is facing outside & roller is facing inside. 	

S. No.	Aggregate to Assemble / Instructions	Fastener, Size, Tool Usage, Precautions, Photos	
32	<p>Exhaust Rocker arm & shaft in Cylinder head cover</p> <ul style="list-style-type: none"> ■ Assemble rocker shaft in the cylinder head cover such that the slot and the internal threads in the shaft are facing outside. ■ Ensure the slot in the rocker shaft is perpendicular to the top mounting hole in the cylinder head cover such that the cover mounting bolt can pass through the slot in the rocker shaft. ■ Assemble 2 Hex Socket pre coated plugs with copper washers in the cylinder head cover. 	<div data-bbox="600 1104 948 1296" style="border: 1px solid black; padding: 5px;"> <p>Hex Socket Hd plug: M14X12 Allen key: 8mm Torque: 2.5-3.0KgM (25-30Nm)</p> </div>	  
33.	<p>Cylinder Head Cover</p> <ul style="list-style-type: none"> ■ Apply Loctite 5900 gasket sealant on cylinder head mating surface. ■ Locate cylinder head cover on the cylinder head and ensure proper seating. ■ Assemble 2 long Hex flange bolts with aluminum washers in the top RH side. 	<div data-bbox="600 1491 948 1756" style="border: 1px solid black; padding: 5px;"> <p>NOTE:</p> <ul style="list-style-type: none"> - Ensure the 2 dowels are located in cylinder head. - Aluminum washers are provided to prevent oil leak through the bolts. </div>	

S. No.	Aggregate to Assemble / Instructions	Fastener, Size, Tool Usage, Precautions, Photos
33.	<p>Cylinder Head Cover</p> <ul style="list-style-type: none"> ■ Assemble 3 long Hex flange bolts in the top RH side. Assemble 2 long Hex flange bolts with aluminium washers in the centre RH side. ■ Assemble 3 long Hex flange bolts in the top LH side. ■ Assemble medium length Hex flange bolt in the RH side rear. ■ Assemble small Hex flange bolt in RH side front. ■ Assemble 2 fully threaded Hex flange bolts inside the inlet & Exhaust tappet housing areas. ■ Tighten all the bolts just sufficiently. Do not torque tighten fully 	<div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Hex flange bolts: M6X55 Socket Spanner: 8mm</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Hex flange bolts: M6X60 Socket Spanner: 8mm</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">NOTE: Aluminium washers are provided to prevent oil leak through the bolts.</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Hex flange bolts: M6X60 Socket Spanner: 8mm</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Hex flange bolts: M6X45 Socket Spanner: 8mm</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Hex flange bolts: M6X40 Socket Spanner: 8mm</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Hex flange bolts: M6X21 Socket Spanner: 8mm</div> <div style="display: flex; justify-content: space-around; align-items: center;">     </div>

S. No.	Aggregate to Assemble / Instructions	Fastener, Size, Tool Usage, Precautions, Photos	
34.	<p>Camshaft Cover small.</p> <ul style="list-style-type: none"> ■ Locate 'O' ring in cam shaft cover small. ■ Locate cam shaft cover in cylinder head & align fixing hole. ■ Assemble Hex flange bolt (fully threaded). ■ Tighten Hex flange bolt on cam shaft cover small AND the 12 bolts on cylinder head cover, diagonally using 8mm socket spanner to respective torque values. 	<p>NOTE:</p> <p>Apply Loctite 5900 gasket sealant on seating face before locating on cylinder head cover</p>	 
35.	<p>Cam Shaft Cover Big</p> <ul style="list-style-type: none"> ■ Assemble cover and tighten with 2 Hex flange bolts (fully threaded) 	<p>Hex flange bolt: M6X16 Socket spanner: 8mm Torque: 0.8-1.2KgM (8-12Nm)</p>	
36.	<p>Tappets Adjustment</p> <ul style="list-style-type: none"> ■ If Magneto rotor NOT fitted on crankshaft: <ul style="list-style-type: none"> - Ensure key way on crankshaft is facing up & piston is at TDC ■ If Magneto rotor is fitted on crankshaft <ul style="list-style-type: none"> - Rotate magneto rotor "CLOCKWISE ONLY" such that the reference mark on the rotor aligns with the inspection hole on cover LH/ Reference mark on Crankcase LH. 	<p>NOTE:</p> <p>Tappets MUST be adjusted ONLY WHEN:</p> <ul style="list-style-type: none"> - Engine is cold - Piston is at TDC on Compression stroke. 	

S. No.	Aggregate to Assemble / Instructions	Fastener, Size, Tool Usage, Precautions, Photos	
36.	<p>Tappets Adjustment</p> <ul style="list-style-type: none"> ■ Locate special tool & loosen adjuster lock nut by turning the long lever anticlockwise. ■ Using a pointed feeler strip, set the specified gap by rotating the knurled head of the special tool: <ul style="list-style-type: none"> - Clockwise to reduce gap. - Anticlockwise to increase gap. ■ Hold the knurled head firmly so that the tappet adjustment does not get disturbed & lock the tappet locknut firmly by turning long lever clockwise. 	<p>Special Tool: ST-27527-2, Tappet adjusting tool & pointed, long feeler strip.</p>	
		<p>Tappet Setting: Inlet: 0.08 - 0.10mm Exhaust: 0.23 - 0.25mm</p>	
		<p>CAUTION:</p> <p>DO NOT adjust the tappets too tight as it will result in heavy load coming on the rocker shafts and damaging the bore in the cylinder head cover.</p>	
37.	<p>Tappet Adjuster Cover Inlet</p> <ul style="list-style-type: none"> ■ Locate O Ring in cover inlet & position cover over cylinder head cover. Tighten with 2 Hex bolts. 	<p>Hex flange bolts: M6X21 Socket Spanner: 8mm Torque: 0.8-1.2KgM (8-12</p>	
38.	<p>Tappet Adjuster Cover Exhaust</p> <ul style="list-style-type: none"> ■ Locate O Ring in cover exhaust & position cover over cylinder head cover. ■ Tighten with 2 hex bolts. 	<p>Hex flange bolts: M6X21 Socket Spanner: 8mm Torque: 0.8-1.2KgM (8-12 Nm)</p>	