



MITSUBISHI DIESEL ENGINE SF Series



Features

The design of 2F series is made to provide you new construction machines with great features. In order to get more performance only with advanced Komatsu's technology.

Dynamic and dependable

Through advanced-controlled hydraulic system with tough control system (electronically). Through balance of gear's ratio, the high-performance controlled, power take output system and engine control system, 2F series has strong and low noisy characteristics.

Fuel efficiency

With advanced control system and distribution system, 2F series has great fuel economy and low noise. It is 10% more efficient than conventional design.

Reliability maintenance

All mechanically important parts are made with hardened steel material, and all bearings in the unit, piston and ring, the special tools, are made according to best practice and best methods.

Easy and quiet

With advanced combustion system, there is great ability to decrease the work change, and all balanced by counter weight, efficient power and increased quality, good structure, better working.

Wide economy of spare parts

Many kinds of the parts of 2F series are interchangeable, which is one of the advantages of excellent 2F.



53F



54F



54F-T



56F



56F-T

Specifications

Model			100	140	180-1	240	300-1	
Engine type			4 stroke cycle, water cooled, vertically mounted A, horizontal, diesel engine					
Continuous diesel rate			1000 (generator rate)					
Volume displacement	litres		4	4	4	4	4	
Power (diesel engine)			2100 x 1000 (2.00' x 1.00')					
Total pulley displacement	cm		1000	1000	1000	1000	1000	
	inches		39.37	39.37	39.37	39.37	39.37	
Compression ratio			17 : 1					
Rotation			1000 (generator) clockwise (view from flywheel end)					
Fuel oil			Diesel fuel (grade No. 2)					
Starting air			200 (generator) 100 (diesel) 100 (No. 2)					
Dimensions	Length	mm	740	840	840	1100	1100	
		inches	29.1	33.1	33.1	43.3	43.3	
	Width	mm	440	440	440	440	440	
		inches	17.3	17.3	17.3	17.3	17.3	
	Height	mm	1000	1110	800	1000	1000	
		inches	39.4	43.7	31.5	39.4	39.4	
Dry weight	kg	100	170	170	200	240		
	lb	220	375	375	440	530		

Output for industrial use at SAE J816b standard conditions (without fan): HP (kW)

Generator					Engine					
100	140	180-1	240	300-1	1000 rpm	1400	1800	2400-1	3000	3600
20000.0	27000.0	35000.0	45000.0	55000.0	1000 rpm	27.0 (20.0)	37.0 (27.0)	48.0 (35.0)	63.0 (46.0)	75.0 (55.0)
30000.0	40000.0	50000.0	65000.0	80000.0	1400 rpm	34.0 (25.0)	46.0 (34.0)	59.0 (43.0)	77.0 (56.0)	92.0 (67.0)
40000.0	53000.0	68000.0	88000.0	110000.0	1800 rpm	45.0 (33.0)	59.0 (43.0)	75.0 (54.0)	97.0 (71.0)	115.0 (84.0)
50000.0	66000.0	85000.0	110000.0	135000.0	2400-1 rpm	57.0 (42.0)	75.0 (55.0)	96.0 (70.0)	125.0 (91.0)	148.0 (108.0)
60000.0	79000.0	102000.0	133000.0	165000.0	3000-1 rpm	70.0 (51.0)	92.0 (67.0)	117.0 (85.0)	152.0 (111.0)	180.0 (132.0)

Output for generator use (without fan): HP (kW)

Generator					Engine					
100	140	180-1	240	300-1	1000 rpm	1400	1800	2400-1	3000	3600
18.0 (13.0)	24.0 (17.0)	31.0 (22.0)	40.0 (29.0)	49.0 (35.0)	1000 rpm	20.0 (14.0)	27.0 (19.0)	35.0 (25.0)	45.0 (32.0)	53.0 (38.0)
27.0 (19.0)	36.0 (26.0)	46.0 (33.0)	59.0 (43.0)	72.0 (52.0)	1400 rpm	26.0 (19.0)	34.0 (24.0)	44.0 (31.0)	56.0 (40.0)	66.0 (48.0)
36.0 (26.0)	47.0 (34.0)	60.0 (43.0)	76.0 (55.0)	93.0 (67.0)	1800 rpm	34.0 (24.0)	44.0 (31.0)	56.0 (40.0)	70.0 (50.0)	82.0 (59.0)

Cooling fan loss (approx): HP (kW)

Engine speed	100	140	180-1	240	300-1
1000 rpm	1.0 (0.7)	1.0 (0.7)	1.0 (0.7)	1.0 (0.7)	1.0 (0.7)
1400 rpm	1.0 (0.7)	1.0 (0.7)	1.0 (0.7)	1.0 (0.7)	1.0 (0.7)
1800 rpm	1.0 (0.7)	1.0 (0.7)	1.0 (0.7)	1.0 (0.7)	1.0 (0.7)
2400 rpm	1.0 (0.7)	1.0 (0.7)	1.0 (0.7)	1.0 (0.7)	1.0 (0.7)
3000 rpm	1.0 (0.7)	1.0 (0.7)	1.0 (0.7)	1.0 (0.7)	1.0 (0.7)

Part No.	Description	Quantity	Part No.	Quantity	Part No.	Quantity	Part No.	Quantity
2-00	Washer	1	2-01	1	2-02	1	2-03	1
2-01	Washer	1	2-04	1	2-05	1	2-06	1
2-02	Washer	1	2-07	1	2-08	1	2-09	1
2-03	Washer	1	2-10	1	2-11	1	2-12	1
2-04	Washer	1	2-13	1	2-14	1	2-15	1
2-05	Washer	1	2-16	1	2-17	1	2-18	1
2-06	Washer	1	2-19	1	2-20	1	2-21	1
2-07	Washer	1	2-22	1	2-23	1	2-24	1
2-08	Washer	1	2-25	1	2-26	1	2-27	1
2-09	Washer	1	2-28	1	2-29	1	2-30	1
2-10	Washer	1	2-31	1	2-32	1	2-33	1
2-11	Washer	1	2-34	1	2-35	1	2-36	1
2-12	Washer	1	2-37	1	2-38	1	2-39	1
2-13	Washer	1	2-40	1	2-41	1	2-42	1
2-14	Washer	1	2-43	1	2-44	1	2-45	1
2-15	Washer	1	2-46	1	2-47	1	2-48	1
2-16	Washer	1	2-49	1	2-50	1	2-51	1
2-17	Washer	1	2-52	1	2-53	1	2-54	1
2-18	Washer	1	2-55	1	2-56	1	2-57	1
2-19	Washer	1	2-58	1	2-59	1	2-60	1
2-20	Washer	1	2-61	1	2-62	1	2-63	1
2-21	Washer	1	2-64	1	2-65	1	2-66	1
2-22	Washer	1	2-67	1	2-68	1	2-69	1
2-23	Washer	1	2-70	1	2-71	1	2-72	1
2-24	Washer	1	2-73	1	2-74	1	2-75	1
2-25	Washer	1	2-76	1	2-77	1	2-78	1
2-26	Washer	1	2-79	1	2-80	1	2-81	1
2-27	Washer	1	2-82	1	2-83	1	2-84	1
2-28	Washer	1	2-85	1	2-86	1	2-87	1
2-29	Washer	1	2-88	1	2-89	1	2-90	1
2-30	Washer	1	2-91	1	2-92	1	2-93	1
2-31	Washer	1	2-94	1	2-95	1	2-96	1
2-32	Washer	1	2-97	1	2-98	1	2-99	1
2-33	Washer	1	2-100	1	2-101	1	2-102	1
2-34	Washer	1	2-103	1	2-104	1	2-105	1
2-35	Washer	1	2-106	1	2-107	1	2-108	1
2-36	Washer	1	2-109	1	2-110	1	2-111	1
2-37	Washer	1	2-112	1	2-113	1	2-114	1
2-38	Washer	1	2-115	1	2-116	1	2-117	1
2-39	Washer	1	2-118	1	2-119	1	2-120	1
2-40	Washer	1	2-121	1	2-122	1	2-123	1
2-41	Washer	1	2-124	1	2-125	1	2-126	1
2-42	Washer	1	2-127	1	2-128	1	2-129	1
2-43	Washer	1	2-130	1	2-131	1	2-132	1
2-44	Washer	1	2-133	1	2-134	1	2-135	1
2-45	Washer	1	2-136	1	2-137	1	2-138	1
2-46	Washer	1	2-139	1	2-140	1	2-141	1
2-47	Washer	1	2-142	1	2-143	1	2-144	1
2-48	Washer	1	2-145	1	2-146	1	2-147	1
2-49	Washer	1	2-148	1	2-149	1	2-150	1
2-50	Washer	1	2-151	1	2-152	1	2-153	1
2-51	Washer	1	2-154	1	2-155	1	2-156	1
2-52	Washer	1	2-157	1	2-158	1	2-159	1
2-53	Washer	1	2-160	1	2-161	1	2-162	1
2-54	Washer	1	2-163	1	2-164	1	2-165	1
2-55	Washer	1	2-166	1	2-167	1	2-168	1
2-56	Washer	1	2-169	1	2-170	1	2-171	1
2-57	Washer	1	2-172	1	2-173	1	2-174	1
2-58	Washer	1	2-175	1	2-176	1	2-177	1
2-59	Washer	1	2-178	1	2-179	1	2-180	1
2-60	Washer	1	2-181	1	2-182	1	2-183	1
2-61	Washer	1	2-184	1	2-185	1	2-186	1
2-62	Washer	1	2-187	1	2-188	1	2-189	1
2-63	Washer	1	2-190	1	2-191	1	2-192	1
2-64	Washer	1	2-193	1	2-194	1	2-195	1
2-65	Washer	1	2-196	1	2-197	1	2-198	1
2-66	Washer	1	2-199	1	2-200	1	2-201	1
2-67	Washer	1	2-202	1	2-203	1	2-204	1
2-68	Washer	1	2-205	1	2-206	1	2-207	1
2-69	Washer	1	2-208	1	2-209	1	2-210	1
2-70	Washer	1	2-211	1	2-212	1	2-213	1
2-71	Washer	1	2-214	1	2-215	1	2-216	1
2-72	Washer	1	2-217	1	2-218	1	2-219	1
2-73	Washer	1	2-220	1	2-221	1	2-222	1
2-74	Washer	1	2-223	1	2-224	1	2-225	1
2-75	Washer	1	2-226	1	2-227	1	2-228	1
2-76	Washer	1	2-229	1	2-230	1	2-231	1
2-77	Washer	1	2-232	1	2-233	1	2-234	1
2-78	Washer	1	2-235	1	2-236	1	2-237	1
2-79	Washer	1	2-238	1	2-239	1	2-240	1
2-80	Washer	1	2-241	1	2-242	1	2-243	1
2-81	Washer	1	2-244	1	2-245	1	2-246	1
2-82	Washer	1	2-247	1	2-248	1	2-249	1
2-83	Washer	1	2-250	1	2-251	1	2-252	1
2-84	Washer	1	2-253	1	2-254	1	2-255	1
2-85	Washer	1	2-256	1	2-257	1	2-258	1
2-86	Washer	1	2-259	1	2-260	1	2-261	1
2-87	Washer	1	2-262	1	2-263	1	2-264	1
2-88	Washer	1	2-265	1	2-266	1	2-267	1
2-89	Washer	1	2-268	1	2-269	1	2-270	1
2-90	Washer	1	2-271	1	2-272	1	2-273	1
2-91	Washer	1	2-274	1	2-275	1	2-276	1
2-92	Washer	1	2-277	1	2-278	1	2-279	1
2-93	Washer	1	2-280	1	2-281	1	2-282	1
2-94	Washer	1	2-283	1	2-284	1	2-285	1
2-95	Washer	1	2-286	1	2-287	1	2-288	1
2-96	Washer	1	2-289	1	2-290	1	2-291	1
2-97	Washer	1	2-292	1	2-293	1	2-294	1
2-98	Washer	1	2-295	1	2-296	1	2-297	1
2-99	Washer	1	2-298	1	2-299	1	2-300	1
2-100	Washer	1	2-301	1	2-302	1	2-303	1
2-101	Washer	1	2-304	1	2-305	1	2-306	1
2-102	Washer	1	2-307	1	2-308	1	2-309	1
2-103	Washer	1	2-310	1	2-311	1	2-312	1
2-104	Washer	1	2-313	1	2-314	1	2-315	1
2-105	Washer	1	2-316	1	2-317	1	2-318	1
2-106	Washer	1	2-319	1	2-320	1	2-321	1
2-107	Washer	1	2-322	1	2-323	1	2-324	1
2-108	Washer	1	2-325	1	2-326	1	2-327	1
2-109	Washer	1	2-328	1	2-329	1	2-330	1
2-110	Washer	1	2-331	1	2-332	1	2-333	1
2-111	Washer	1	2-334	1	2-335	1	2-336	1
2-112	Washer	1	2-337	1	2-338	1	2-339	1
2-113	Washer	1	2-340	1	2-341	1	2-342	1
2-114	Washer	1	2-343	1	2-344	1	2-345	1
2-115	Washer	1	2-346	1	2-347	1	2-348	1
2-116	Washer	1	2-349	1	2-350	1	2-351	1
2-117	Washer	1	2-352	1	2-353	1	2-354	1
2-118	Washer	1	2-355	1	2-356	1	2-357	1
2-119	Washer	1	2-358	1	2-359	1	2-360	1
2-120	Washer	1	2-361	1	2-362	1	2-363	1
2-121	Washer	1	2-364	1	2-365	1	2-366	1
2-122	Washer	1	2-367	1	2-368	1	2-369	1
2-123	Washer	1	2-370	1	2-371	1	2-372	1
2-124	Washer	1	2-373	1	2-374	1	2-375	1
2-125	Washer	1	2-376	1	2-377	1	2-378	1
2-126	Washer	1	2-379	1	2-380	1	2-381	1
2-127	Washer	1	2-382	1	2-383	1	2-384	1
2-128	Washer	1	2-385	1	2-386	1	2-387	1
2-129	Washer	1	2-388	1	2-389	1	2-390	1
2-130	Washer	1	2-391	1	2-392	1	2-393	1
2-131	Washer	1	2-394	1	2-395	1	2-396	1
2-132	Washer	1	2-397	1	2-398	1	2-399	1
2-133	Washer	1	2-400	1	2-401	1	2-402	1
2-134	Washer	1	2-403	1	2-404	1	2-405	1
2-135	Washer	1	2-406	1	2-407	1	2-408	1
2-136	Washer	1	2-409	1	2-410	1	2-411	1
2-137	Washer	1	2-412	1	2-413	1	2-414	1
2-138	Washer	1	2-415	1	2-416	1	2-417	1
2-139	Washer	1	2-418	1	2-419	1	2-420	1
2-140	Washer	1	2-421	1	2-422	1	2-423	1
2-141	Washer	1	2-424	1	2-425	1	2-426	1
2-142	Washer	1	2-427	1	2-428	1	2-429	1
2-143	Washer							

S3F



S4F



S4F-T



**Flywheel & housing for
S3F, S4F, S4F-T**



S6F



S6F-T



**Flywheel & housing for
S6F, S6F-T**



MITSUBISHI DIESEL ENGINE SF SERIES

SASIN
SPECIALIZED
AGRICULTURAL
MACHINERY



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