



成大牌減速機

CHENTRA BRAND SPEED REDUCER

05.09



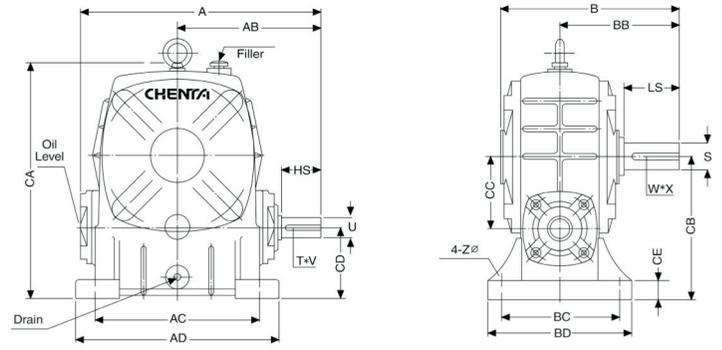
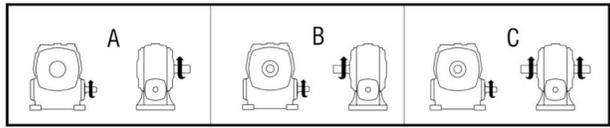
齒輪減速機專業工廠

仁武機械股份有限公司
JEN WU MACHINERY CO., LTD.

KAOSIUNG TAIWAN R.O.C.

ASS

Single Worm

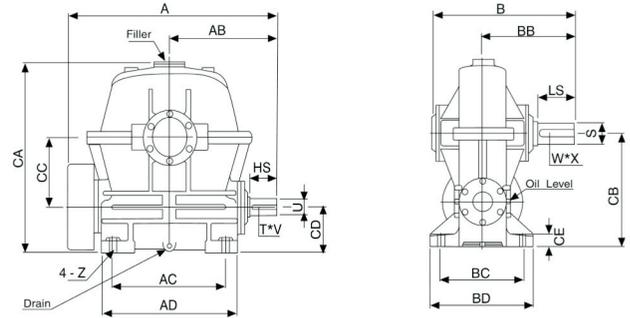
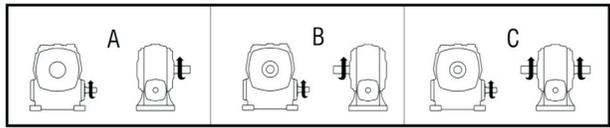


Dimension : m/m

Size	Ratio	A	AB	AC	AD	B	BB	BC	BD	CA	CB	CC	CD	CE	Z	Input Shaft			Output Shaft			OIL (l)	Weight (Kg)
																HS	U	T * V	LS	S	W * X		
40	1/10	139	83	70	88	120	78	80	102	135	70	40	30	10	9	25	12	4 * 2.5	35	16	5 * 3	0.2	4.1
50		181	107	110	140	147	95	95	120	180	100	50	50	18	11	30	12	4 * 2.5	40	17	5 * 3	0.22	7
60		204	124	120	150	168	110	105	130	210	120	60	60	20	11	40	15	5 * 3	50	22	7 * 4	0.32	9.7
70		235	140	150	190	196	130	115	150	240	140	70	70	22	15	40	18	5 * 3	60	28	7 * 4	0.55	14.6
80		265	160	180	220	216	140	135	170	278	160	80	80	23	15	50	22	7 * 4	65	32	10 * 4.5	0.77	19.7
100		325	192	220	270	260	170	155	190	376	200	100	100	25	15	50	25	7 * 4	75	38	10 * 4.5	1.53	38.4
120	1/60	389	230	260	320	291	190	180	230	435	240	120	120	30	18	65	30	7 * 4	85	45	12 * 4.5	2.4	63.4
135		430	260	290	350	320	210	200	250	490	270	135	135	30	18	75	35	10 * 4.5	95	55	15 * 5	3.25	83.2
155		479	286	320	400	377	242	220	280	487	290	155	135	30	20	85	40	10 * 4.5	100	60	15 * 5	4.1	115.3
175		517	308	350	410	381	248	250	310	536	335	175	160	37	20	85	45	12 * 4.5	110	65	18 * 6	5.8	158.3

ASS

Single Worm With Fan

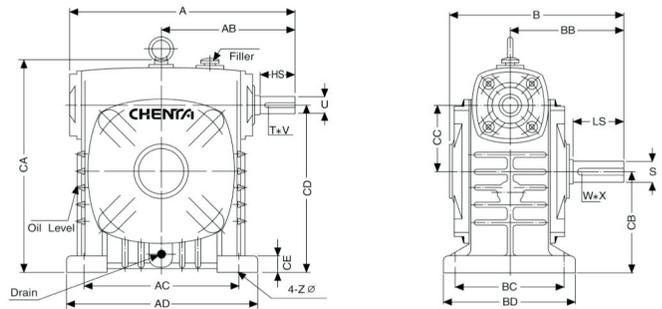
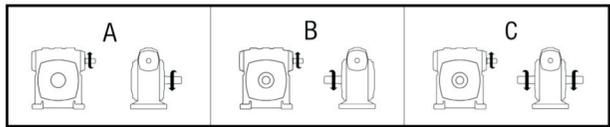


Dimension : m/m

Size	Ratio	A	AB	AC	AD	B	BB	BC	BD	CA	CB	CC	CD	CE	Z	Input Shaft			Output Shaft			OIL (l)	Weight (Kg)
																HS	U	T * V	LS	S	W * X		
200	1/10	697	357	350	420	479	305	280	350	637	390	200	190	30	22	95	50	12 * 4.5	125	70	20 * 7	6.5	210
225		720	361	390	470	530	345	330	410	670	415	225	190	45	27	95	55	15 * 5	140	80	20 * 7	7	282
250		815	420	440	520	565	360	380	440	742	450	250	200	40	27	110	60	15 * 5	145	90	24 * 8	9	337
300		958	495	520	620	628	410	368	450	815	490	300	190	45	36	125	70	18 * 6	170	95	24 * 8	21	496
350	1/60	1068	570	697	700	748	480	432	520	940	565	350	215	55	43	145	80	20 * 7	190	115	32 * 10	30	673
400		1160	620	660	780	775	500	470	580	1070	650	400	250	55	43	150	85	24 * 8	205	130	35 * 11	41	1006

BSS

Single Worm

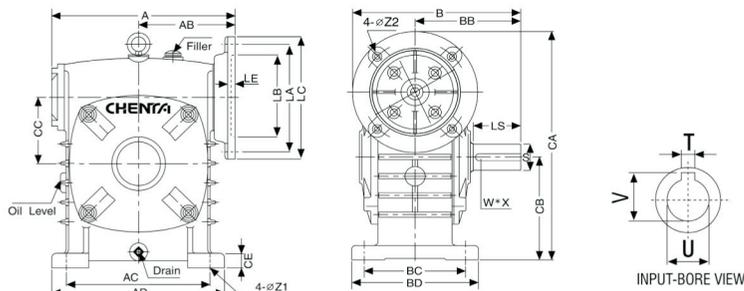


Dimension : m/m

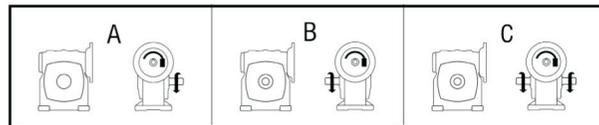
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																HS	U	T * V	LS	S	W * X		
40	1/10	139	83	70	88	120	78	80	102	135	70	40	110	10	9	25	12	4 * 2.5	35	16	5 * 3	0.2	4.1
50		181	107	110	140	147	95	95	120	175	80	50	130	15	11	30	12	4 * 2.5	40	17	5 * 3	0.4	6.5
60		204	124	120	150	168	110	105	130	200	90	60	150	18	11	40	15	5 * 3	50	22	7 * 4	0.5	8.5
70		235	140	150	190	196	130	115	150	235	105	70	175	20	15	40	18	5 * 3	60	28	7 * 4	0.8	14
80		265	160	180	220	216	140	135	170	260	120	80	200	20	15	50	22	7 * 4	65	32	10 * 4.5	1.2	19
100		328	192	220	270	262	170	155	190	359	150	100	250	25	15	50	25	7 * 4	75	38	10 * 4.5	2.2	38
120	1/60	389	230	260	320	288	190	180	230	425	180	120	300	30	18	65	30	7 * 4	85	45	12 * 4.5	4.2	64
135		435	260	290	350	320	210	200	250	478	215	135	350	30	18	75	35	10 * 4.5	95	55	15 * 5	6	85

BSM

Single Worm With Flange

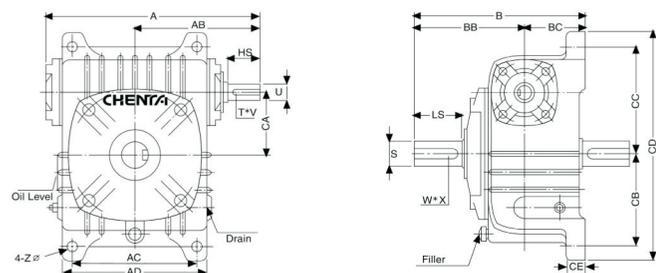


Shaft Direction



Dimension : m/m

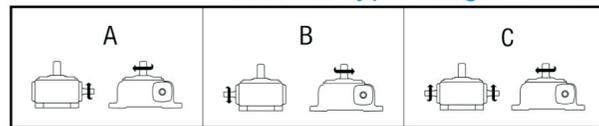
Size	Ratio	A	AB	AC	AD	B	BB	BC	BD	CA	CB	CC	CE	Z1	Input Bore			Output Shaft			Flange					Oil (l)	Weight (Kg)
															U	T	V	LS	S	W * X	LA	LB	LC	LE	Z2		
50	1/10	174	97	110	140	175	95	95	120	210	80	50	18	11	11 14	4 5	12.8 16	40	17	5 * 3	115	95	140	4	M8	0.22	7.2
60		177	97	120	150	190	110	105	130	230	90	60	20	11	11 14	4 5	12.8 16	50	22	7 * 4	130	110	160	4	M8	0.32	10
70		213 215	118 120	150	190	210 230	130	115	150	255 275	105	70	22	15	14 19	5 6	16 21.8	60	28	7 * 4	130 165	110 130	160 200	4 5	M8 M10	0.55	15
80		234	130	180	220	240	140	135	170	300	120	80	20	15	19 24	6 8	21.8 27.3	65	32	10 * 4.5	165	130	200	4	M10	0.77	20.2
100		273 278	140 142	220	270	270 295	170	155	190	350 375	150	100	25	15	24 28	8 8	27.3 31.3	75	38	10 * 4.5	165 215	130 180	200 250	5 5	M10 M12	1.53	39.5
120		339	180	260	320	315	190	180	230	425	180	120	30	18	28	8	31.3	85	45	12 * 4.5	215	180	250	5	M10	2.4	65
135	1/60	370 390	195 218	290	350	335 360	210	200	250	475 500	215	135	30	18	28 38	8 10	31.3 41.3	95	55	15 * 5	215 265	180 230	250 300	5 4.5	M12 M15	3.25	85.2
155		405.5 430	213.5 236.5	320	380	367 392	242	220	280	530 540	235	155	32	20	28 38	8 10	31.3 41.3	100	60	15 * 5	215 265	180 230	250 300	5 4.5	M12 M12	7.4	116
175		420 465	212.5 255	350	410	398 423	248	250	310	585 610	260	175	35	20	38 42	10 12	41.3 45.3	110	65	18 * 6	265 300	230 250	300 350	5 6	M12 M19	11.5	162



ESS / VSS

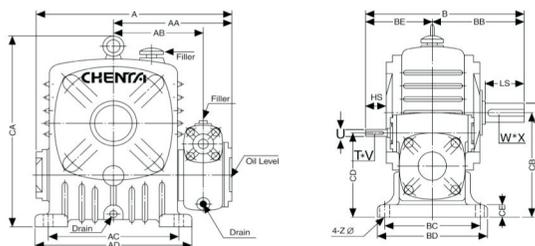
Vertical Type Single Worm

Shaft Direction



Dimension : m/m

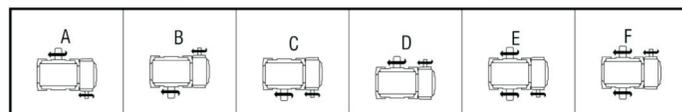
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															HS	U	T * V	LS	S	W * X		
40	1/10	140	83	70	95	120	78	42	40	65	85	180	14	9	25	12	4 * 2.5	35	16	5 * 3	0.2	4.1
50		179	107	90	118	145	95	50	50	93	102	220	18	11	30	12	4 * 2.5	40	17	5 * 3	0.4	6.5
60		201	124	100	126	165	110	55	60	105	120	260	20	11	40	15	5 * 3	50	22	7 * 4	0.6	9
70		235	140	120	156	195	130	65	70	120	135	295	20	15	40	18	5 * 3	60	28	7 * 4	1.1	13
80		265	160	140	176	213	140	73	80	130	150	320	20	15	50	22	7 * 4	65	32	10 * 4.5	1.5	18
100		328	192	190	226	260	170	90	100	155	180	375	30	15	50	25	7 * 4	75	38	10 * 4.5	3.0	42
120	1/60	389	230	220	268	290	190	100	120	185	215	450	30	18	65	30	7 * 4	85	45	12 * 4.5	5.0	66
135		430	260	260	295	320	210	110	135	210	235	495	35	18	75	35	10 * 4.5	95	55	15 * 5	7.5	90
155		479	286	290	336	382	242	140	155	145	265	456	30	20	85	40	10 * 4.5	100	60	15 * 5	9.2	115
175		515	308	320	376	398	248	150	175	167	293	516	35	20	85	45	12 * 4.5	110	65	18 * 6	10.5	155



ASF

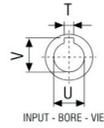
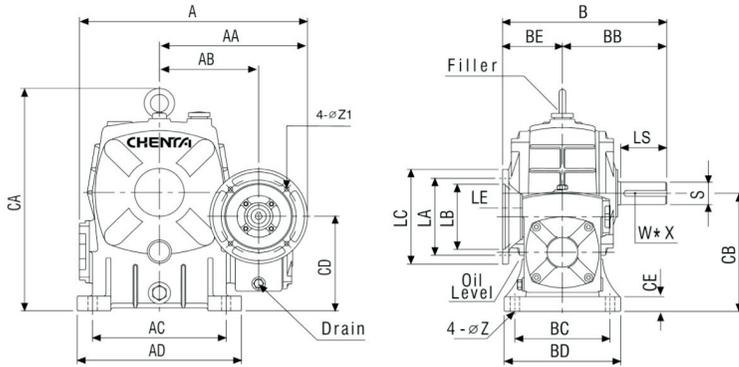
Double Worm

Shaft Direction



Dimension : m/m

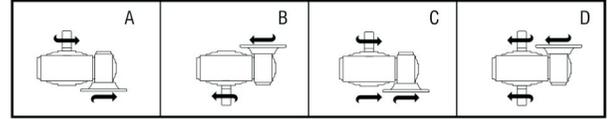
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																	HS	U	T * V	LS	S	W * X		
50 - 80	1/100	286	184	132	220	180	247	140	135	170	107	278	160	130	23	15	30	12	4 * 2.5	65	32	10 * 4.5	1.2	24
60 - 100		352	219	161	270	220	294	170	155	190	124	372	200	160	25	15	40	15	5 * 3	75	38	10 * 4.5	2.2	47
70 - 120		417	258	192	320	260	330	190	180	230	140	430	240	190	30	18	40	18	5 * 3	85	45	12 * 4.5	3.2	74
80 - 135		463	287	211	350	290	370	210	200	250	160	491	270	215	30	18	50	22	7 * 4	95	55	15 * 5	4.3	98
100 - 155		540	340	257	320	385	434	242	220	280	192	487	290	235	30	20	50	25	7 * 4	100	60	15 * 5	6.1	136
120 - 175		585	376	275	350	410	478	248	250	310	230	553	335	280	37	24	65	30	7 * 4	110	65	18 * 6	9.2	196
120 - 200	1/3600	660	414	312.5	420	350	535	305	280	350	230	637	390	310	30	22	65	30	7 * 4	125	70	20 * 7	14.7	258
135 - 225		672	425	315	470	390	605	345	330	410	260	680	415	325	35	27	75	35	10 * 4.5	140	80	20 * 7	17.2	367



ASX

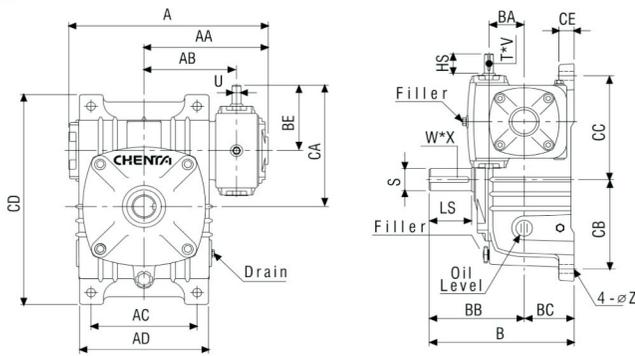
Double Worm With Flange

Shaft Direction



Dimension : m/m

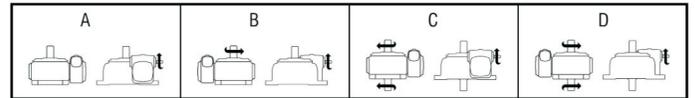
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																	U	T	V	LS	S	W * X	LA	LB	LC	LE	Z1		
50-80	1/100	316	212	132	180	220	280	140	135	170	140	271	160	130	23	15	11	4	12.8	65	32	10 * 4.5	115	95	140	4	M8	1.2	25
60-100		372	241	161	220	270	267	170	155	190	97	372	200	160	25	15	11	4	12.8	75	38	10 * 4.5	130	110	160	4	M8	2.2	48
70-120		428	272	192	260	320	308	190	180	230	118	435	240	190	30	18	14	5	16	85	45	12 * 4.5	130	110	160	4	M8	3.2	76
80-135		448	292	192	260	320	310	190	180	230	118	435	240	190	30	18	14	5	16	85	45	12 * 4.5	130	110	160	4	M10	3.2	76
100-155		481	311	211	290	350	340	210	200	250	130	490	270	215	30	18	19	6	21.8	95	55	15 * 5	165	130	200	5	M10	4.3	100
120-175	545	357	257	320	385	382	242	220	280	140	487	290	235	32	20	24	8	27.3	100	60	15 * 5	165	130	200	5	M10	6.1	139	
120-200	574	382	282	320	385	384	242	220	280	140	487	290	235	32	20	24	8	27.3	100	60	15 * 5	165	130	200	5	M12	6.1	139	
135-225	608	400	275	350	410	428	248	250	310	180	553	335	280	37	24	28	8	31.3	110	65	18 * 6	215	180	250	5	M10	9.2	200	
120-200	1/3600	687	437	312.5	350	420	485	305	280	350	180	637	390	310	30	22	28	8	31.3	125	70	20 * 7	215	180	250	5	M12	15	261
135-225		692	440	315	390	470	540	345	330	410	195	680	425	335	35	27	28	8	31.3	140	80	20 * 7	215	180	250	5	M12	17	365



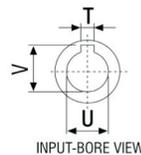
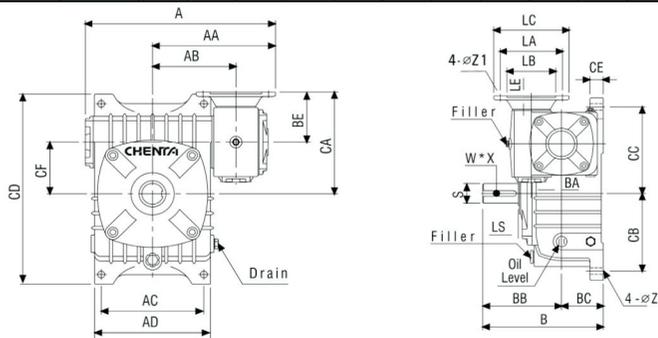
ESF

Vertical Double Worm

Shaft Direction



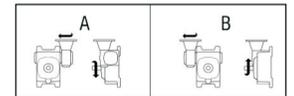
Size	Ratio	A	AA	AB	AC	AD	B	BA	BB	BC	BE	CA	CB	CC	CD	CE	Z	Input Shaft			Output Shaft			OIL (l)	Weight (Kg)
																		HS	U	T * V	LS	S	W * Y		
50-80	1/100	289	184	132	140	176	213	50	140	73	107	187	130	150	320	20	15	30	12	4 * 2.5	65	32	10 * 4.5	1.8	24
60-100		352	219	161	190	226	260	60	170	90	124	224	155	180	375	30	15	40	15	5 * 3	75	38	10 * 4.5	3.8	52
70-120		417	258	192	220	266	290	70	190	100	140	260	185	215	450	30	18	40	18	5 * 3	85	45	12 * 4.5	6	75
80-135		462	287	211	260	295	320	80	210	110	160	295	210	235	495	35	18	50	22	7 * 4	95	55	15 * 5	8.5	105
100-155		540	349	257	290	336	382	100	242	140	192	347	145	265	456	30	20	50	25	7 * 4	100	60	15 * 5	12	135
120-175	1/3600	585	376	275	320	376	398	120	248	150	230	405	167	293	516	35	20	65	30	7 * 4	110	65	18 * 6	15	192



ESX

Vertical Double Worm With Flange

Shaft Direction



Dimension : m/m

Size	Ratio	A	AA	AB	AC	AD	B	BA	BB	BC	BE	CA	CB	CC	CD	CE	CF	Z	Input Bore			Output Shaft			Flange					OIL (l)	Weight (Kg)
																			U	T	V	LS	S	W * X	LA	LB	LC	LE	Z1		
50-80	1/100	317	212	132	140	176	213	50	140	73	140	220	130	150	320	20	80	15	11	4	12.8	65	32	10 * 4.5	115	95	140	4	M8	1.8	24
60-100		378	241	161	190	226	260	60	170	90	97	197	155	180	375	30	100	15	11	4	12.8	75	38	10 * 4.5	130	110	160	4	M8	3.8	52
70-120		428	272	192	220	266	290	70	190	100	118	238	185	215	450	30	120	18	14	5	16	85	45	12 * 4.5	130	110	160	4	M8	6	75
80-135		448	292	192	220	266	290	70	190	100	118	238	185	215	450	30	120	18	14	5	16	85	45	12 * 4.5	130	110	160	4	M10	6	75
100-155		480	311	211	260	295	320	80	210	110	130	265	210	235	495	30	135	18	19	6	21.8	95	55	15 * 5	165	130	200	5	M10	8.5	105
120-175	550	357	257	290	336	382	100	242	140	140	277	145	265	456	30	155	20	24	8	27.3	100	60	15 * 5	165	130	200	5	M12	12	135	
120-175	1/3600	607	400	275	320	376	398	120	248	150	180	355	167	293	516	35	175	20	28	8	31.3	110	65	18 * 6	215	180	250	5	M10	15	192

Chenta Gear Reducers Operating Instruction

I. INSTALLATION

1. Input speed must not exceed 1800 RPM
2. Before installation, please check if the input horsepower and ratio are identical with the data printed on name plate, also if the output rotation direction meets your requirements
3. Reducer should be installed on a stable foundation and good air circulation and the convenience of oil filling / draining should be considered
4. After installation, please check input shaft by hand first to see if turns smoothly
5. Before operation an unloading rotating test should be proceeded and any abnormal phenomenon occurred should be corrected immediately
6. After installation, please change pipe plug to breather plug if needed

II. LUBRICATION

1. The aluminium series reducers are all filled with synthetic oil except the size 30 that is filled with high efficient grease
2. A new operation reducers need to replace oil after 500 hours usages after then every 2500 hours should replace again. Moreover a regular oil checking is required and replace if needed
3. Certain brand and specification of gear oil are required to a same reducer and be sure not to mix using different brand, specification or type of oil
4. Before replacing oil the inside of reducer should be cleaned by new oil and drain out then fill in new oil
5. During operation, if the heat is over than 80°C or any abnormal noise is occurred, should shutdown the machine and check immediately and start to running only after the problem is resolved

III. MAINTENANCE

1. No heavy hit on reducer to avoid any damage
2. A regular maintenance is required and if any worn out to the gear set found an immediate and efficient action should be taken. The accurate of any spare parts replace should be exactly the same as the original standart and unloading running test in advance is required
3. Establish a reasonable maintenance system and record down carefully for all been met



Chenta Gear Reducers Cause & Troubleshooting

CAUSE	REASON	IMPROVEMENT
I Overheat	<ol style="list-style-type: none"> 1. Overload 2. Lubricant oil overfill or shortage 3. Improper lubricant oil 4. Extra friction on oil seal 	<ol style="list-style-type: none"> 1. Adjust to proper loading 2. Add Lubricant to the level of oil gauge 3. Change proper lubricant oil 4. Lip lubricant at oil seal
II Noise	<ol style="list-style-type: none"> 1. Consistent noise (improper gears contact) (bearing damaged) 2. Screaming noise (bearing gap too small) (lubricant oil shortage) 3. Inconsistent noise (some object insert) (bearing damaged) 	<ol style="list-style-type: none"> 1. Repair gears Replace bearing 2. Replace bearing Fill in lubricant oil 3. Remove debris & replace lubricant oil Replace bearing
III Vibration	<ol style="list-style-type: none"> 1. Gear wear 2. Debris inside 3. Bearing worn-out or damaged 4. Bolt loose 	<ol style="list-style-type: none"> 1. Replace gear 2. Remove debris & replace lubricant oil 3. Replace bearing 4. Tighten bolt
IV Oil leakage	<ol style="list-style-type: none"> 1. Oil seal damage 2. Gasket damage 3. Loose drain plug 4. Loose covers or flange 	<ol style="list-style-type: none"> 1. Replace Oil seal 2. Replace Gasket 3. Tighten drain plug 4. Tighten the bolts
V Input & output shaft fail	<ol style="list-style-type: none"> 1. Gear-bound caused by overheat 2. Bearing damage 3. Debris between gears 	<ol style="list-style-type: none"> 1. Adjust or replace gears 2. Replace Bearing 3. Remove debris clean inside then replace lubricant oil
VI Input shaft fail to drive output shaft	<ol style="list-style-type: none"> 1. Gear wear 2. Damage to key connecting gear and output shaft 3. input shaft rupture 4. output shaft rupture 	<ol style="list-style-type: none"> 1. Replace gears 2. Replace key 3. Replace input shaft 4. Replace output shaft
VII Gear worm out	<ol style="list-style-type: none"> 1. Overload 2. Improper lubricant oil 3. Lubricant oil shortage 4. Excessive ambient temperature 	<ol style="list-style-type: none"> 1. Adjust to proper loading 2. Change proper lubricant oil 3. Refill lubricant oil 4. Ventilation improvement



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