

Marine Transmission

TK 650 L



STANDARD SCOPE

SAE housing # 0, #1
 Flexible coupling for 14" and 18" flywheel
 Mechanical control valve
 Oil strainer
 Trolling valve (mechanical or electrical)
 Oil filter mounted
 Oil cooler with thermostatic bypass valve
 Companion flange/bolts set
 Mounting brackets
 Shaft with key



Available Ratio's 3.53, 4.04, 4.48
Max Input Torque: 222.7 (Kgf.m)
Dry Weight: 547 kg

ADVANTAGES OF TK 650 L

- 01** Greater durability through change of the rubber block made of special material.
- 02** Hydraulic clutch can be easily handled outside.
- 03** Control system fitted for a small-size ship and high speed.
- 04** Guaranteed durability.

SPECIFICATIONS

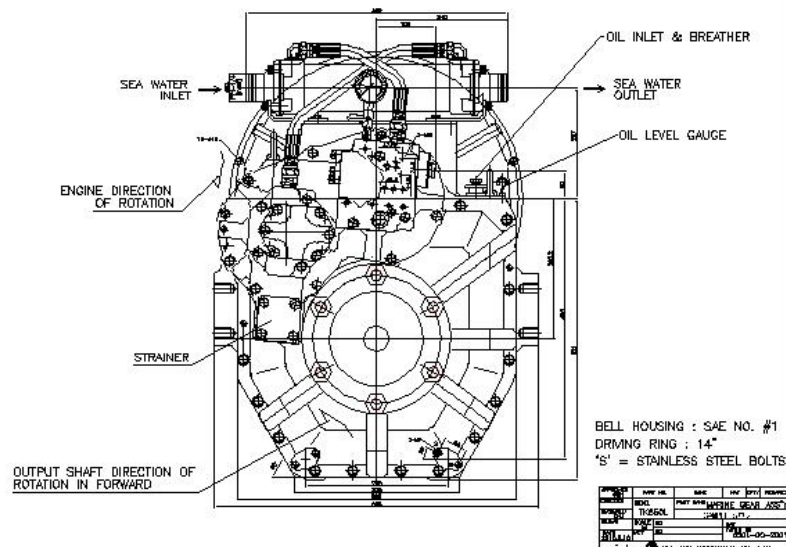
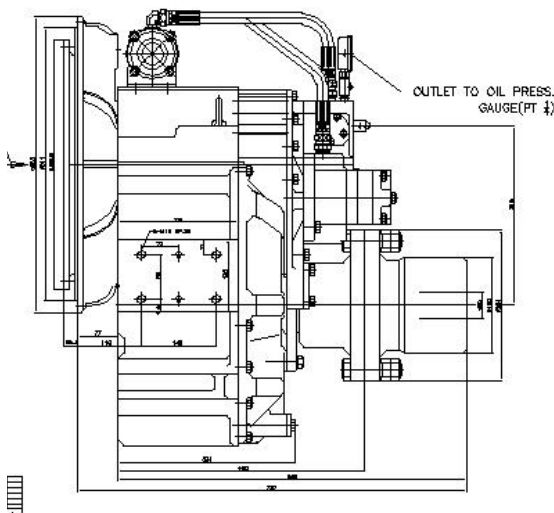
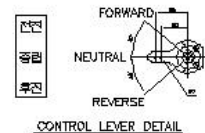
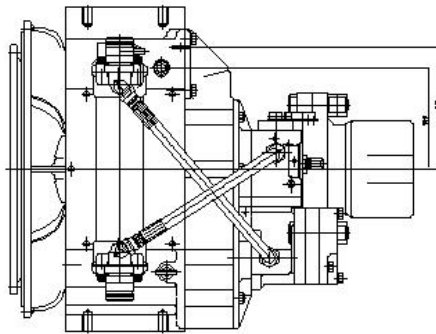
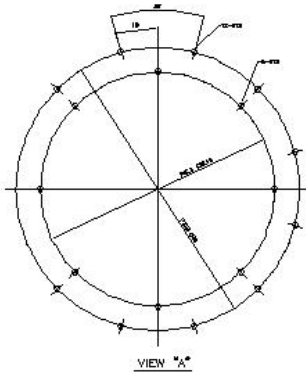
Model	Reduction Ratio	Max. Input Speed (rpm)	Max. Input Torque (Kgf.m)	Input Rating									Dry Weight (Kg)	Flywheel Housing (SAE No.)	Flywheel (Clutch No.)
				1600 rpm			1800 rpm			2100 rpm					
				KW	HP	PS	KW	HP	PS	KW	HP	PS			
TK 650 L	3.53, 4.04 4.48	2,600	222.7	365	490	497	411	551	559	480	644	653	547	0,1	14,18

Marine Transmission

TK 650 L



TK650L MARINE GEAR SPECIFICATION	
GEAR RATIO	17:1
OIL CAPACITY	4.0L, 4.4L
WEIGHT	530 kg
OIL VISCOSITY	SAE #30
STRAINER	WIRE MESH
OIL PRESSURE	CUTCH OIL 18-23 kg/cm ² AT RATED ENGINE SPEED
	LUB. OIL 1-5 kg/cm ²
DIRECTION OF ROTATION IN FORWARD	INPUT SHAFT C.C.W. VIEWED FROM THE STERN
	OUTPUT SHAFT C.W. VIEWED FROM THE STERN
OIL CHANGE INTERVAL	THE FIRST 100 HOURS OF INITIAL OPERATION AND EVERY 1000 HOURS THEREAFTER
SHIFTING LIMIT	UNDER 50% OF THE RATED ENGINE SPEED
OIL COOLER	WATER FLOW 40-60 l/min.
	TEMPERATURE OF COOLING WATER MAX. 32°C

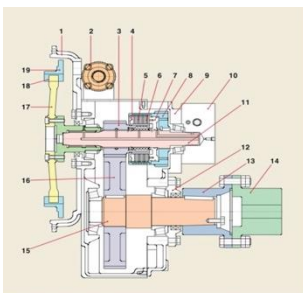


BELL HOUSING : SAE NO. #1
DRIVING RING : 14"
'S' = STAINLESS STEEL BOLTS

REV	DATE	BY	CHK	APP	REMARKS
1	2010.01.10	TK650L			INITIAL DESIGN
2	2010.01.10	TK650L			REVISION
3	2010.01.10	TK650L			REVISION
4	2010.01.10	TK650L			REVISION
5	2010.01.10	TK650L			REVISION
6	2010.01.10	TK650L			REVISION
7	2010.01.10	TK650L			REVISION
8	2010.01.10	TK650L			REVISION
9	2010.01.10	TK650L			REVISION
10	2010.01.10	TK650L			REVISION
11	2010.01.10	TK650L			REVISION
12	2010.01.10	TK650L			REVISION
13	2010.01.10	TK650L			REVISION
14	2010.01.10	TK650L			REVISION
15	2010.01.10	TK650L			REVISION
16	2010.01.10	TK650L			REVISION
17	2010.01.10	TK650L			REVISION
18	2010.01.10	TK650L			REVISION
19	2010.01.10	TK650L			REVISION
20	2010.01.10	TK650L			REVISION

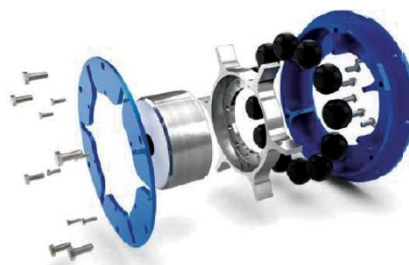
PRECAUTIONS

- Align the center of engine with marine gear (For greater effectiveness and longer lifespan)
- Install the supporting bracket of marine gear.
- When assembling flange on output shaft of marine gear, be sure to align another flange accurately.
- Make sure to wash flywheel housing cover if dust should accumulate.
- When installing the cable and the remote-control level, check to make sure the marine gear level is smooth.
- The oil with the viscosity equivalent to SAE#30 is recommended.
- Check the oil amount of oil before sailing.
- After 100 hours of operation check the oil, and then change every 1,000 hours.



SECTIONAL DRAWING

- | | |
|-------------------|----------------------|
| ① Wheel Cover | ⑩ Input Shaft |
| ② Oil Cooler | ⑪ Retainer Cover |
| ③ Pinion Gear | ⑫ Coupling |
| ④ Plate, Side | ⑬ Coupling Companion |
| ⑤ Plate, Sintered | ⑭ Output Shaft |
| ⑥ Plate, Steel | ⑮ Reduction Gear |
| ⑦ Piston | ⑯ Spider |
| ⑧ Drum Gear | ⑰ Rubber Block |
| ⑨ Block Cover | ⑱ Driving Ring |
| ⑫ Control Block | |



ADVANTAGES OF FLEXIBLE COUPLING

- 01 Plug-in Connection
- 02 Heat-Resistant up to 130°C
- 03 Fail-safe solution
- 04 Lubrication free
- 05 Rubber block solution