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REV.  
A  
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WORKFLOW  
ECNWF-102385  
NDWF-03844

MASS ELASTIC SYSTEM

DATE:  
9/12/12

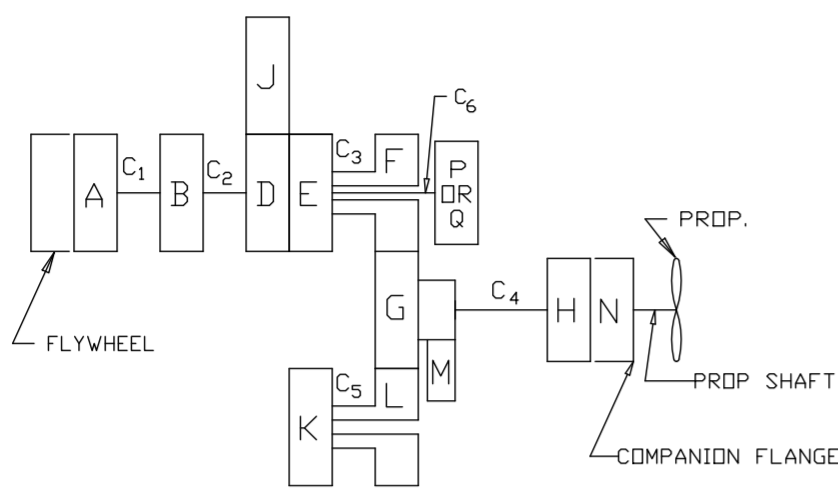
SCALE:  
NONE

DRAWN BY:  
JMF

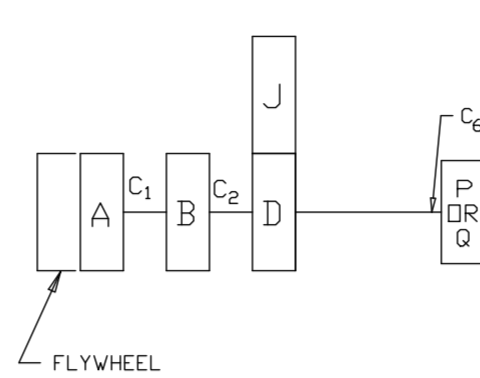
CHECKED BY:  
FB

APPROVED BY:  
DV

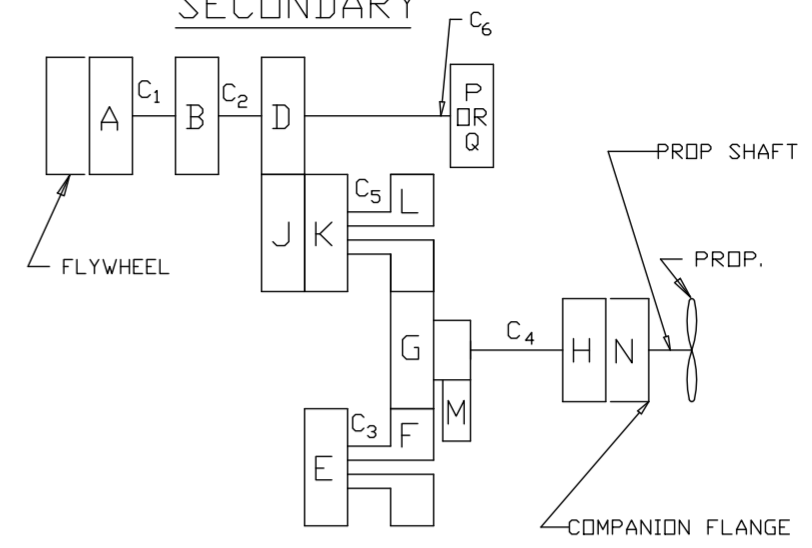
PRIMARY



NEUTRAL



SECONDARY



MASS

WR<sup>2</sup> (kg·m<sup>2</sup>)

APPLICABLE MODEL CODES  
1 - MGX-5136SC PER 1027445  
2 - MG-5136SC PER 1027560

RATIO:	2.90:1	2.57:1	2.04:1	1.73:1	1.48:1	1.28:1	1.10:1	1.00:1
A DRIVE RING, FLEXIBLE COUPLING OUTER PARTS	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
B FLEXIBLE COUPLING INNER PARTS, 1/4 PRIMARY SHAFT C <sub>2</sub> , ADAPTER, HUB, BEARING	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
D DRIVING TRANSFER GEAR, 3/4 PRIMARY SHAFT C <sub>2</sub> , REAR BEARING, PISTON, BACKPLATE, DRIVE PLATES	0.0995	0.0995	0.0995	0.0995	0.0995	0.0995	0.0995	0.0995
E CLUTCH HUB, DRIVEN PLATES	0.0138	0.0138	0.0138	0.0138	0.0138	0.0138	0.0138	0.0138
F PRIMARY PINION, THRUST WASHERS	0.0079	0.0115	0.0208	0.0259	0.0311	0.0389	0.0466	0.0558
G OUTPUT GEAR, BEARING, 3/4 OUTPUT SHAFT C <sub>4</sub>	0.4135	0.3544	0.3001	0.2331	0.1696	0.1259	0.1518	0.1302
H OUTPUT FLANGE, 1/4 OUTPUT SHAFT C <sub>4</sub>	0.0505	0.0505	0.0505	0.0505	0.0505	0.0505	0.0505	0.0505
J DRIVEN TRANSFER GEAR, SECONDARY SHAFT C <sub>2</sub> , BEARINGS, PISTON, BACKPLATE, DRIVE PLATES	0.1013	0.1013	0.1013	0.1013	0.1013	0.1013	0.1013	0.1013
K CLUTCH HUB, DRIVEN PLATES	0.0138	0.0138	0.0138	0.0138	0.0138	0.0138	0.0138	0.0138
L SECONDARY PINION, THRUST WASHERS	0.0079	0.0114	0.0208	0.0258	0.0311	0.0388	0.0465	0.0557
N COMPANION FLANGE - FOR USE WITHOUT SHAFT BRAKE	0.0822	0.0822	0.0822	0.0822	0.0822	0.0822	0.0822	0.0822
P 1/4 PRIMARY SHAFT, REAR BEARING & LESS PTO	0.0034	0.0034	0.0034	0.0034	0.0034	0.0034	0.0034	0.0034
P2 ⊕ 1/4 PRIMARY SHAFT, REAR BEARING & SAE J744, 32-4 LIVE PTO ADAPTER	0.0037	0.0037	0.0037	0.0037	0.0037	0.0037	0.0037	0.0037
P3 ⊕ 1/4 PRIMARY SHAFT, REAR BEARING & SAE J744, 101-2, 25-4 LIVE PTO ADAPTER	0.0037	0.0037	0.0037	0.0037	0.0037	0.0037	0.0037	0.0037
P4 ⊕ 1/4 PRIMARY SHAFT, REAR BEARING & SAE J744, 101-2, 22-4 LIVE PTO ADAPTER	0.0036	0.0036	0.0036	0.0036	0.0036	0.0036	0.0036	0.0036
Q1 ⊕ 1/4 PRIMARY SHAFT, REAR BEARING & SAE J744, 127-2/4, 32-4 HYDRAULIC PTO	#	#	#	#	#	#	#	#
Q2 ⊕ 1/4 PRIMARY SHAFT, REAR BEARING & SAE J744, 101-2, 22-4 HYDRAULIC PTO	#	#	#	#	#	#	#	#

TORSIONAL RIGIDITY (N·m/rad)

FLEXIBLE COUPLING C <sub>1</sub>	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
PRIMARY SHAFT C <sub>2</sub>	3.68E+05	3.68E+05	3.68E+05	3.68E+05	3.68E+05	3.68E+05	3.68E+05	3.68E+05
PINION HUB C <sub>3</sub>	1.28E+07	1.28E+07	1.28E+07	1.28E+07	1.28E+07	1.28E+07	1.28E+07	1.28E+07
OUTPUT SHAFT C <sub>4</sub>	2.35E+06	2.35E+06	2.35E+06	2.35E+06	2.35E+06	2.35E+06	2.35E+06	2.35E+06
PINION HUB C <sub>5</sub>	1.28E+07	1.28E+07	1.28E+07	1.28E+07	1.28E+07	1.28E+07	1.28E+07	1.28E+07
PRIMARY SHAFT C <sub>6</sub> WITH LIVE PUMP DRIVE	2.24E+05	2.24E+05	2.24E+05	2.24E+05	2.24E+05	2.24E+05	2.24E+05	2.24E+05
PRIMARY SHAFT C <sub>6</sub> WITH HYDRAULIC CLUTCH PTO	#	#	#	#	#	#	#	#

MINIMUM OUTER DIAMETER OR ROOT DIAMETER (mm)

FLEXIBLE COUPLING C <sub>1</sub>	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
PRIMARY SHAFT C <sub>2</sub>	60.07	60.07	60.07	60.07	60.07	60.07	60.07	60.07
PINION HUB C <sub>3</sub>	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
OUTPUT SHAFT C <sub>4</sub>	74.45	74.45	74.45	74.45	74.45	74.45	74.45	74.45
PINION HUB C <sub>5</sub>	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
PRIMARY SHAFT C <sub>6</sub> WITH LIVE PUMP DRIVE	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00
PRIMARY SHAFT C <sub>6</sub> WITH HYDRAULIC CLUTCH PTO	#	#	#	#	#	#	#	#

POLAR MOMENT OF INERTIA (m<sup>4</sup>)

FLEXIBLE COUPLING C <sub>1</sub>	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
PRIMARY SHAFT C <sub>2</sub>	1.27E-06	1.27E-06	1.27E-06	1.27E-06	1.27E-06	1.27E-06	1.27E-06	1.27E-06
PINION HUB C <sub>3</sub>	4.64E-06	4.64E-06	4.64E-06	4.64E-06	4.64E-06	4.64E-06	4.64E-06	4.64E-06
OUTPUT SHAFT C <sub>4</sub>	3.02E-06	3.02E-06	3.02E-06	3.02E-06	3.02E-06	3.02E-06	3.02E-06	3.02E-06
PINION HUB C <sub>5</sub>	4.64E-06	4.64E-06	4.64E-06	4.64E-06	4.64E-06	4.64E-06	4.64E-06	4.64E-06
PRIMARY SHAFT C <sub>6</sub> WITH LIVE PUMP DRIVE	1.63E-07	1.63E-07	1.63E-07	1.63E-07	1.63E-07	1.63E-07	1.63E-07	1.63E-07
PRIMARY SHAFT C <sub>6</sub> WITH HYDRAULIC CLUTCH PTO	#	#	#	#	#	#	#	#

NOTES:

- ⊕ INCLUDE MASS "P2", "P3", "P4", "Q1" OR "Q2" ONLY IF OPTIONAL PTO DRIVE IS SPECIFIED. "P2", "P3", "P4", "Q1" OR "Q2" IS THE SAME FOR PRIMARY, SECONDARY AND NEUTRAL.
- Δ REFER TO INPUT GROUP DRAWINGS FOR WR<sup>2</sup> AND TORSIONAL RIGIDITY DATA.
- # REFER TO HYDRAULIC PTO GROUP DRAWINGS FOR WR<sup>2</sup> AND TORSIONAL RIGIDITY DATA.
- ALL WR<sup>2</sup> APPLY DIRECTLY TO NAMED MASS. TO RELATE ELSEWHERE, USE RATIO OF UNIT. RATIO OF "D" TO "J" = 1:1.
- ALL MASSES HAVE RELATED MISCELLANEOUS HARDWARE INCLUDED IN WR<sup>2</sup>. WR<sup>2</sup> OF OIL IS OMITTED.