

COTTA

TRANSMISSION COMPANY, LLC

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PRECISION ENGINEERED FOR TODAY'S DIESEL ENGINES.

Compact and rugged, Cotta's engine mounted speed increasers are designed to meet the demands of modern diesel engines. Choose from our standard models or we will design one for your application . . . either way COTTA will meet the challenge.

Standard case is cast iron.
For custom cases, fabricated
stress relieved steel is used.

Lube pump and
water/
oil heat exchanger
provided. Optional
heat exchangers are
available.

Standard keyed
stub shaft.
Options include
splined, extended
length, flanged, or
customer speci-
fied. Shaft can be
12, 6, or 9 o'clock
to the input.

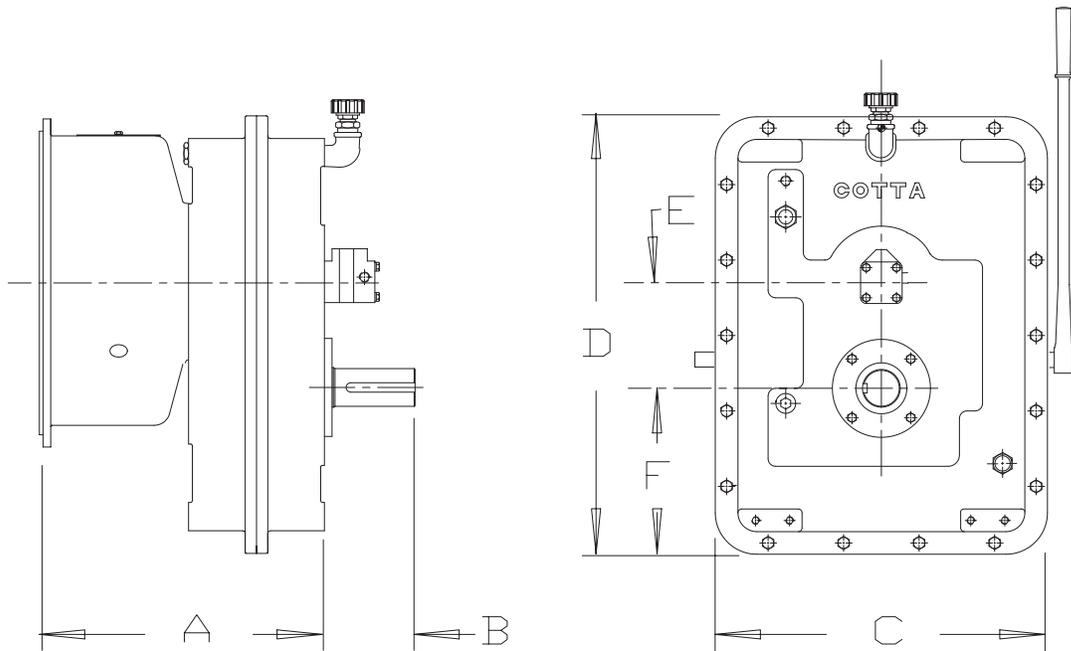
Various flywheel
couplings including
over center clutch-
es, torsional cou-
plings, drive plates,
and custom.

SAE housings from
00 to 5 for minimum
installation space.
Remote mounting
available.

SPEED INCREASESERS

- Pumps
- Compressors
- Gen-sets
- Fans
- Vacuum pumps

COTTA SPEED INCREASERS



Model	Torque Capacity (lb. ft.)	Ratio Range	SAE Hsg. Size	Approx Weight (lbs.)	Output Shaft Dia.	Key Size	A	B	C	D	E	F
AO2053A	650	1 to 4	1 (2) 3 4	400	2.25	5/8	14.62	5.65	16.12	21.75	5.5	9.13
AO2053E	450	1 to 4	1 (2) 3 4	415	2.25	5/8	14.62	5.65	16.12	21.75	5.5	9.13
SI2A	1450	1.5 to 3.07	0 (1) 2	750	2.5	5/8	18.5	6.0	22.0	29.0	7.0	11.0
SI2E	1300	1.5 to 3	0 (1) 2	800	2.5	5/8	18.5	6.0	22.0	29.0	7.0	11.0
SI3A	2000	1.39 - 3.04	0 (1)	1050	2.75	5/8	22.75	6.3	25.0	33.00	8.0	12.5
SI3E	1900	1.38 to 3	0 (1)	1185	2.75	5/8	22.75	6.3	25.0	33.00	8.0	12.5
GO1700A	5500	1.42 to 3.0	00 (0)	1900	2.75	5/8	26.75	7.4	28.25	35.19	10.25	15.37
GO1700E	5500	1.27 to 2.95	00 (0)	1925	2.75	5/8	26.75	7.4	28.25	35.19	10.25	15.37
GO1900A	7900	1.28 to 5	(00) 0	2100	3.25	3/4	24.5	7.15	38.0	42.0	13.5	19.0
GO1900A	7900	1.28 to 5	(00) 0	2200	3.25	3/4	24.5	7.15	38.0	42.0	13.5	19.0

- All dimensions are in inches.
- Circled bell housings are standard. Chart dimension "A" is based upon this standard. Consult individual spec sheets for optional bell housing dimensions.
- Standard output shaft location for speed increasers is 12 o'clock to the input.
- Cotta speed increasers are designed to be driven clockwise facing the input shaft.
- Refer to individual specification sheets for speed limitations.
- All speed increasers require rear supports. Location of support holes vary. See spec sheet for specific dimensions.

MODEL AO2053A
SPEED INCREASER

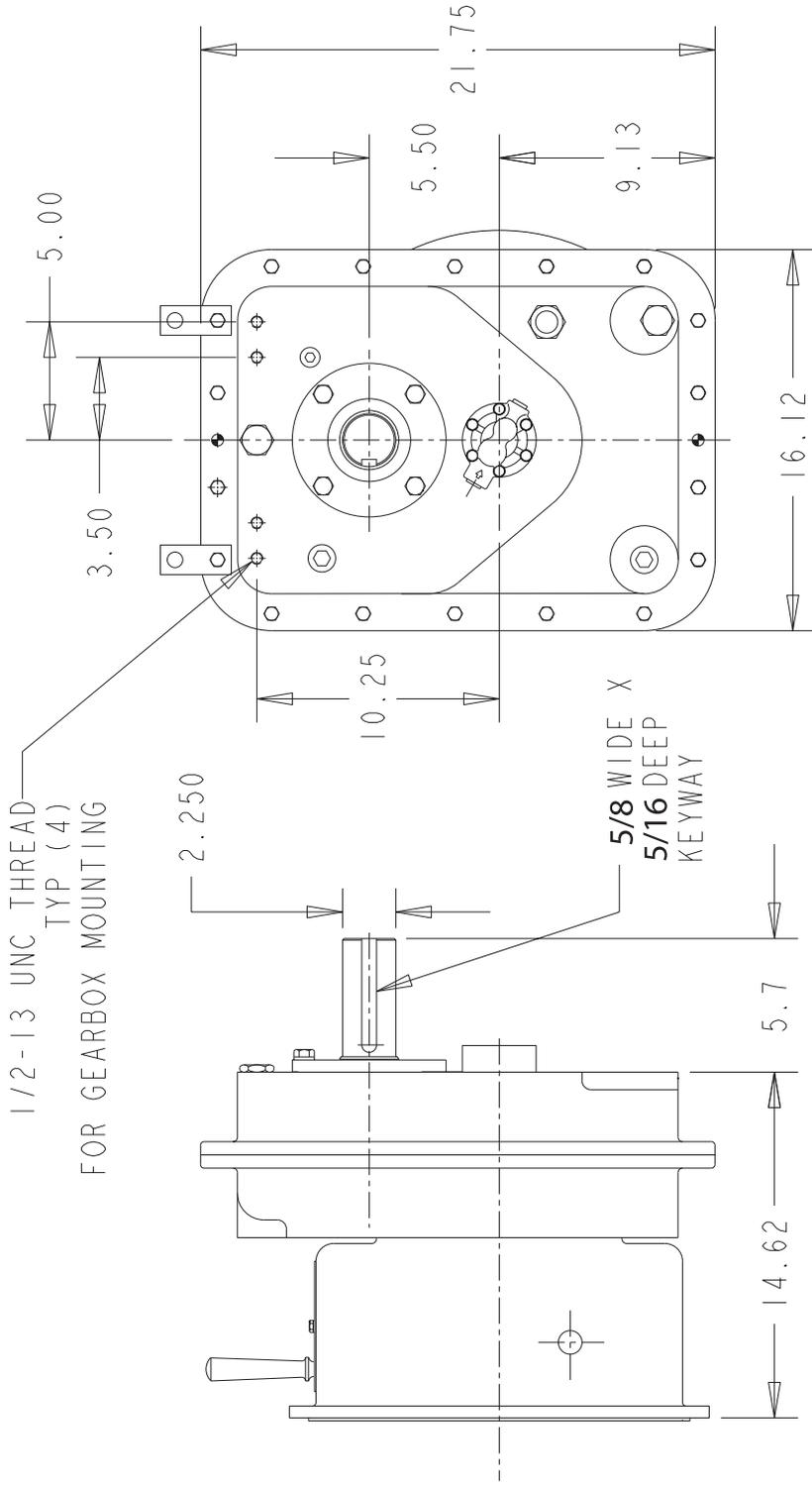
Model AO2053A is a heavy duty unit mounted speed increaser having anti-engine rotation. It is available with a variety of input bell housings to fit the different engines. A wide range of ratios are offered. The gears are helical, carburized and are designed per AGMA specifications. The bearings are tapered roller. The case is cast iron.

CAPACITY:	650 lb. ft.
MAXIMUM INPUT SPEED:	3000 RPM
MAXIMUM OUTPUT SPEED:	4500 RPM
RATIOS: (STANDARD)	1.55, 2.0 1.40, 1.80, 2.50, 3.00
BELL HOUSINGS:	SAE #1, #2, #3, #4
CLUTCH SIZES:	C110, SP111, SP211, SP114
OUTPUT SHAFT:	2.250 diameter x 5" long, 5/8 x 5/16 keyway. Output shaft located above the input shaft at 12 o'clock.
REAR SUPPORT:	4 Holes 1/2-13 on rear cover for customer support plate
LUBRICATION:	Splash ISO Grade 68, AGMA #2
WEIGHT:	400 lbs

07/31/03

MODEL AO2053A SPEED INCREASER

OUTPUT CAN BE ORIENTED
AT 6 OR 12 O'CLOCK POSITION



DO NOT USE DIMENSIONS ON THIS DRAWING FOR
INSTALLATIONS, USE CERTIFIED PRINT PROVIDED
WITH ORDERS.

MODEL AOR2053A
SPEED INCREASER

Model AOR2053A is an independently mounted speed increaser. The gears are helical and are carburized to RC58 minimum. The bearings are tapered roller and the case is cast iron.

CAPACITY:	650 lb. ft. (nominal input torque) (See AO2053A capacity curve)
MAXIMUM INPUT SPEED:	3600 RPM
MAXIMUM OUTPUT SPEED:	5000 RPM
DIRECTION OF ROTATION:	Output rotation is opposite to input rotation
RATIOS:	1.20, 1.40, 1.55, 1.80, 2.0, 2.50, 3.00
INPUT SHAFT:	2.25" dia. x 5" long with 5/8 x 5/16 keyway
OUTPUT SHAFT:	2.25" dia. x 5" long with 5/8 x 5/16 keyway
CENTER DISTANCE:	5.500"
LUBRICATION:	Splash ISO Grade 46, AGMA #1
MOUNTING:	There is a 6.999" dia. pilot and 4 holes 3/4-10 on a 9.000" B.C. on the front of the case for mounting purposes. There are also 4 holes 1/2-13 on the case rear cover that can also be used if required.
WEIGHT:	350 lbs

07/31/03

MODEL AO2053E
SPEED INCREASER

Model AO2053E is a heavy duty unit mounted speed increaser having engine rotation. It is available with a variety of input bell housings to fit the different engines. A wide range of ratios are offered. The gears are helical, carburized and are designed per AGMA specifications. The bearings are tapered roller. The case is cast iron.

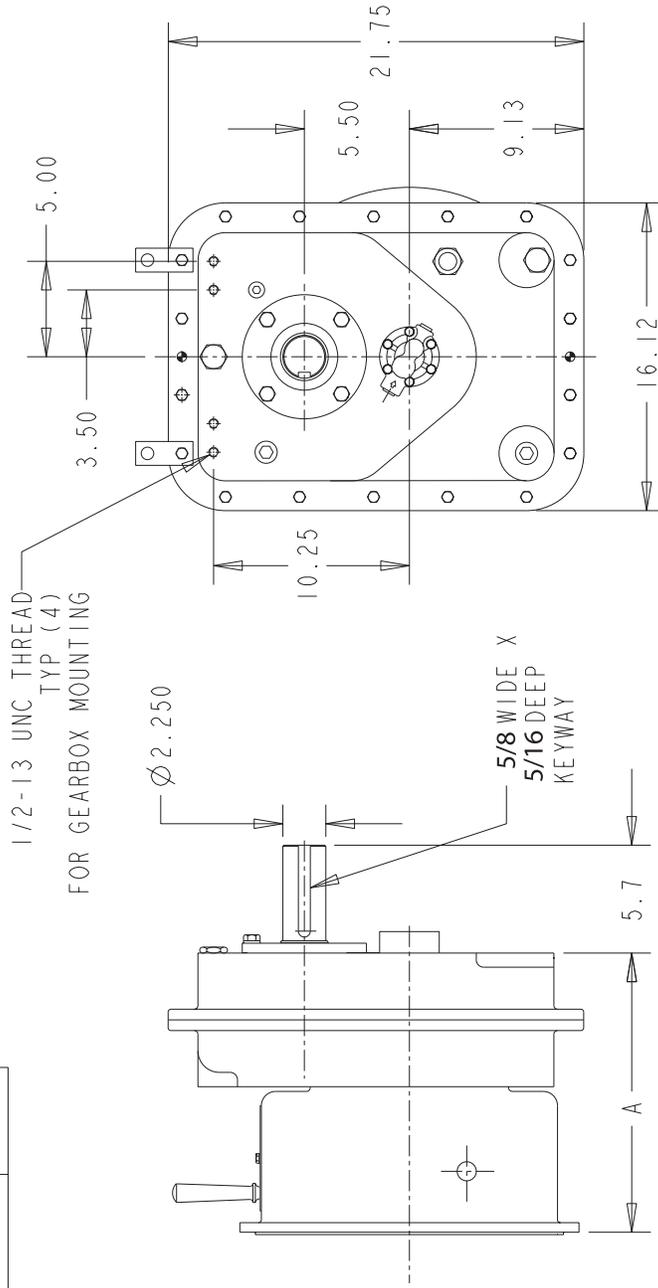
CAPACITY:	450 lb. ft. (nominal input torque)
MAXIMUM INPUT SPEED:	3000 RPM
MAXIMUM OUTPUT SPEED:	4500 RPM
RATIOS: (STANDARD)	1.50, 1.96
(SPECIAL)	1.42, 1.67, 2.48, 3.0
BELL HOUSINGS:	SAE #1, #2, #3, #4
CLUTCH SIZES:	C110, SP111, SP211, SP114
OUTPUT SHAFT:	2.250 diameter x 5' long, 5/8 x 5/16 keyway. Output shaft located above the input shaft at 12 o'clock.
REAR SUPPORT:	4 Holes 1/2-13 on rear cover for customer support plate
LUBRICATION:	Splash ISO Grade 68, AGMA #2
WEIGHT:	415 lbs

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MODEL AO2053E SPEED INCREASER

BELLHSG SAE#	DIM A
#1	16.5
#2, #3, #4	14.62

OUTPUT CAN BE ORIENTED
AT 6 OR 12 O'CLOCK POSITION



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MODEL AOR2053E
SPEED INCREASER

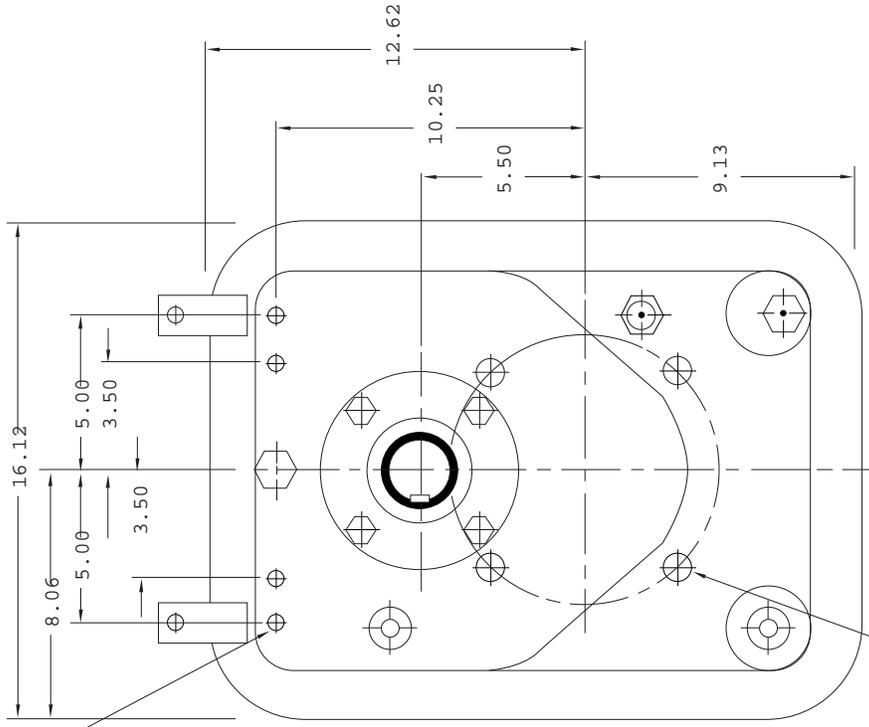
Model AOR2053E is an independently mounted speed increaser. The gears are helical and are carburized to RC58 minimum. The bearings are tapered roller and the case is cast iron.

CAPACITY:	650 lb. ft. (nominal input torque) (See AO2053A capacity curve)
MAXIMUM INPUT SPEED:	3600 RPM
MAXIMUM OUTPUT SPEED:	5000 RPM
RATIOS:	1.20, 1.40, 1.55, 1.80, 2.0, 2.50, 3.00
INPUT SHAFT:	2.25" dia. x 5" long with 5/8 x 5/16 keyway
OUTPUT SHAFT:	2.25" dia. x 5" long with 5/8 x 5/16 keyway
CENTER DISTANCE:	5.500"
LUBRICATION:	Splash ISO Grade 46, AGMA #1
MOUNTING:	There is a 6.999" dia. pilot and 4 holes 3/4-10 on a 9.000" B.C. on the front of the case for mounting purposes. There are also 4 holes 1/2-13 on the case rear cover that can also be used if required.
WEIGHT:	350 lbs

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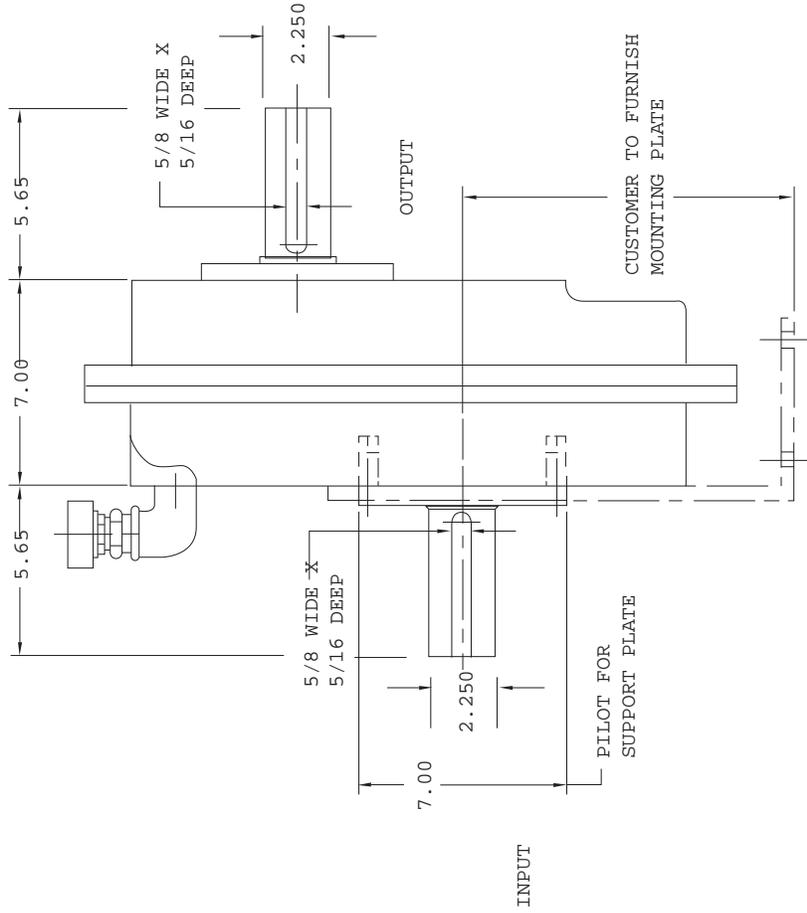
MODEL AOR2053E SPEED INCREASER

1/2-13 THREAD-0.88 DEEP
(4) MOUNTING HOLES



3/4-10 THREAD- 1.0 DEEP
(4) HOLES ON OPPOSITE SIDE
ON A 9.00 DIA BC
FOR SUPPORT PLATE MOUNTING

CUSTOMER TO FURNISH
MOUNTING BRACKETS TO SUIT



DO NOT USE DIMENSIONS ON THIS DRAWING FOR
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MODEL SI2A
SPEED INCREASER

Model SI2A is a heavy duty unit mounted speed increaser having anti-engine rotation. It is available with a variety of input housings and clutches or rubber block drives to fit the different engines. A wide range of ratios are offered.

The gears are helical, carburized and precision ground and are per AGMA specifications. The bearings are taper roller.

CAPACITY (nominal input torque):	1450 lb. ft.
MAXIMUM INPUT SPEED:	3000 RPM with SP214 & SP314 clutch 2000 RPM with SP218 clutch
MAXIMUM OUTPUT SPEED:	4500 RPM
RATIOS:	1.5, 1.68, 1.75, 1.97, 2.24, 2.55, 3.07
BELL HOUSINGS:	SAE #0, #1, #2
CLUTCHES:	SP211, SP214, SP314, SP218
OUTPUT SHAFT:	2.500" diameter with 5/8 x 5/16 keyway
REAR SUPPORT:	4 holes 1/2-13 on rear cover for customers support plate
LUBRICATION:	ISO Viscosity Grade 68 Lube pump and filter furnished
COOLING:	Heat exchanger is furnished (loose)
WEIGHT:	750 lbs

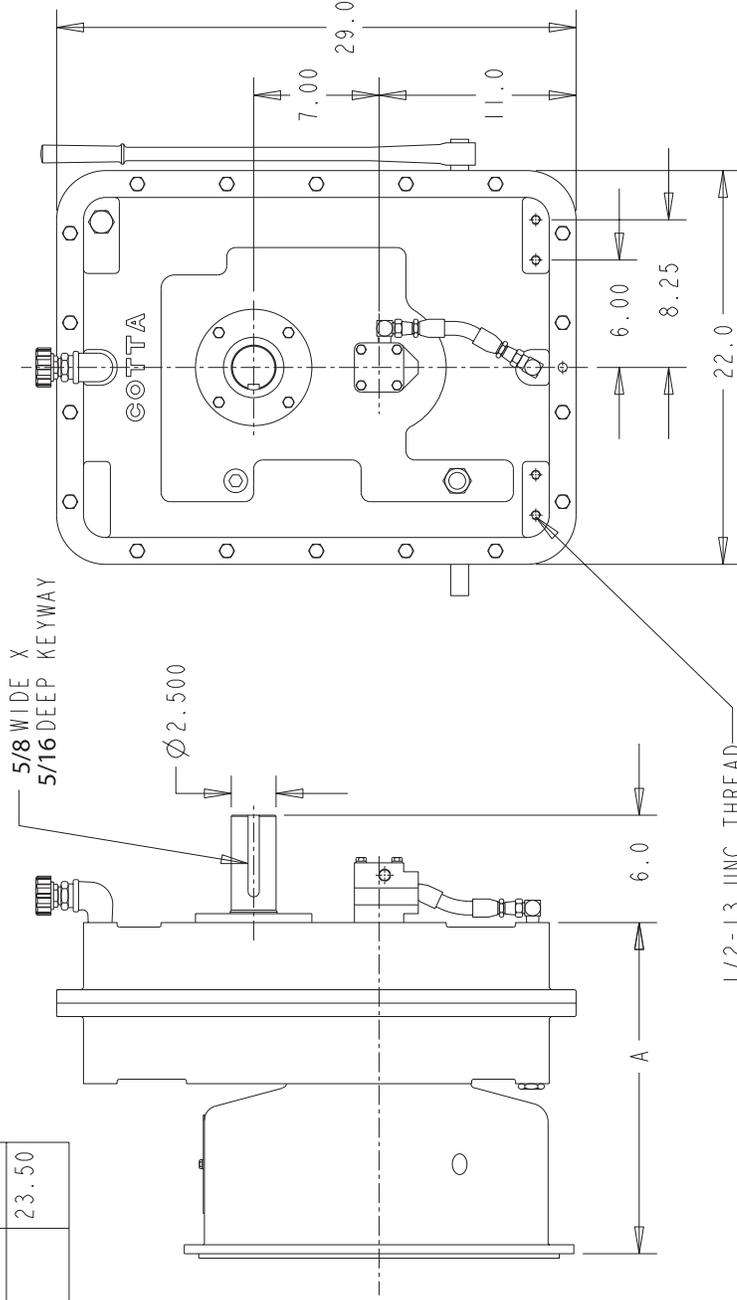
Note: The output shaft can be located at 6 o'clock (below the input shaft) or at the 12 o'clock (above the input shaft) positions.

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MODEL S12A SPEED INCREASER

BELLHSG SAE #	DIM A
#2	16.62
#1	18.50
#1 (DEEP)	20.00
#0	23.50

OUTPUT CAN BE ORIENTED
AT 3, 6, 9, OR 12 O'CLOCK POSITION
CONTACT COTTA FOR MOUNTING HOLE LOCATION



1/2-13 UNC THREAD
TYP (4)
FOR GEARBOX MOUNTING

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INSTALLATIONS, USE CERTIFIED PRINT PROVIDED
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MODEL SI2E
SPEED INCREASER

Model SI2E is a heavy duty unit mounted speed increaser having engine rotation. It is available with a variety of input housings to fit the different engines. A wide range of ratios are offered.

The gears are helical, carburized and precision ground and are per AGMA specifications. The bearings are taper roller.

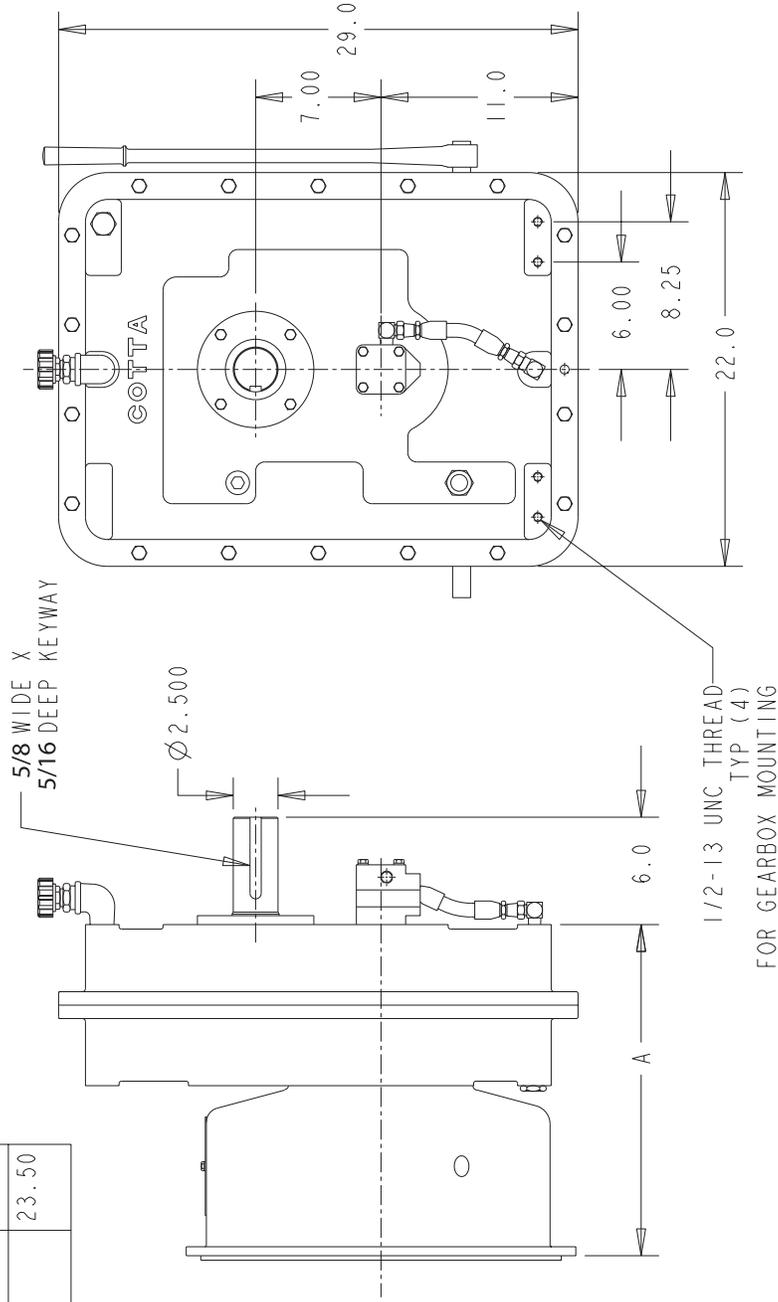
CAPACITY (nominal input torque):	1300 lb. ft.
MAXIMUM INPUT SPEED:	3000 RPM with SP214 & SP314 clutch 2000 RPM with SP218 clutch
MAXIMUM OUTPUT SPEED:	4500 RPM
RATIOS:	1.47, 1.66, 1.74, 1.97, 2.25, 2.46, 2.55, 3.0
BELL HOUSINGS:	SAE #0, #1, #2
CLUTCHES:	SP211, SP214, SP314, SP218
OUTPUT SHAFT:	2.500" diameter with 5/8 x 5/16 keyway
REAR SUPPORT:	4 holes 1/2-13 on rear cover for customers support plate
LUBRICATION:	ISO Viscosity Grade 68 Lube pump and filter furnished
COOLING:	Heat exchanger is furnished (loose)
WEIGHT:	800 lbs

Note: The output shaft can be located at 6 o'clock (below the input shaft) or at the 12 o'clock (above the input shaft) positions.

MODEL SIZE SPEED INCREASER

BELLHSG SAE #	DIM A
#2	16.62
#1	18.50
#1 (DEEP)	20.00
#0	23.50

OUTPUT CAN BE ORIENTED
AT 3, 6, 9, OR 12 O'CLOCK POSITION
CONTACT COTTA FOR MOUNTING HOLE LOCATION



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MODEL SI3A
SPEED INCREASER

Model SI3A is a heavy duty unit mounted speed increaser having anti-engine rotation. It is available with a variety of input housings and clutches (or rubber block drives or flywheel couplings) to fit the different engines. A wide range of ratios are offered.

The gears are helical, carburized and precision ground and are per AGMA Q-12. The bearings are taper roller throughout. The case is heavy cast iron.

CAPACITY (nominal input torque):	2000 lb. ft.
MAXIMUM INPUT SPEED:	3000 RPM NOTE: with SP218 clutch - 2000 RPM with SP318 clutch - 2350 RPM
MAXIMUM OUTPUT SPEED:	6000 RPM
RATIOS:	1.39, 1.50, 1.66, 2.0, 2.21, 2.44, 3.04
BELL HOUSINGS:	SAE #0, #1
CLUTCHES:	SP314, SP218, SP318 and 14" and 18" rubber block drives
OUTPUT SHAFT:	2.750" diameter with 5/8 x 5/16 keyway
REAR SUPPORT:	4 holes 5/8-11 on rear cover for customers support plate
LUBRICATION:	ISO Viscosity Grade 68 Lube pump and filter furnished
COOLING:	Heat exchanger is furnished (loose)
WEIGHT:	1000 lbs

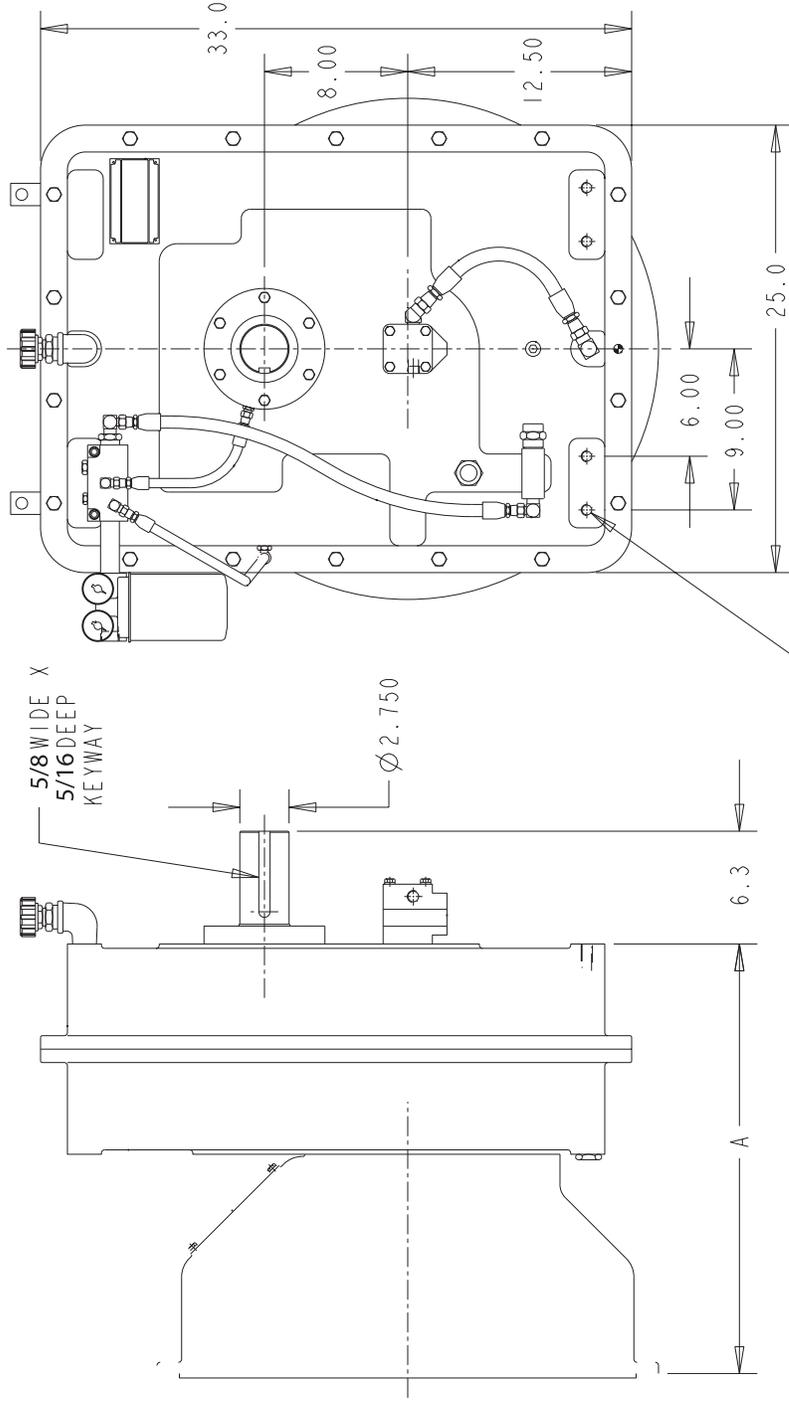
Note: The output shaft can be located at 6 o'clock (below the input shaft) or at the 12 o'clock (above the input shaft) positions.

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MODEL SI3A SPEED INCREASER

BELLHSG SAE #	DIM A
#1	22.75
#0	26.25

OUTPUT CAN BE ORIENTED
AT 3, 6, 9, OR 12 O'CLOCK POSITION
CONTACT COTTA FOR MOUNTING HOLE LOCATION



5/8-11 UNC THREAD
TYP (4)
FOR GEARBOX MOUNTING

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MODEL SI3E
SPEED INCREASER

Model SI3E is a heavy duty unit mounted speed increaser having engine rotation. It is available with a variety of input housings and clutches (or rubber block drives or flywheel couplings) to fit the different engines. A wide range of ratios are offered.

The gears are helical, carburized and precision ground and are per AGMA specifications. The bearings are taper roller throughout. The case is heavy cast iron.

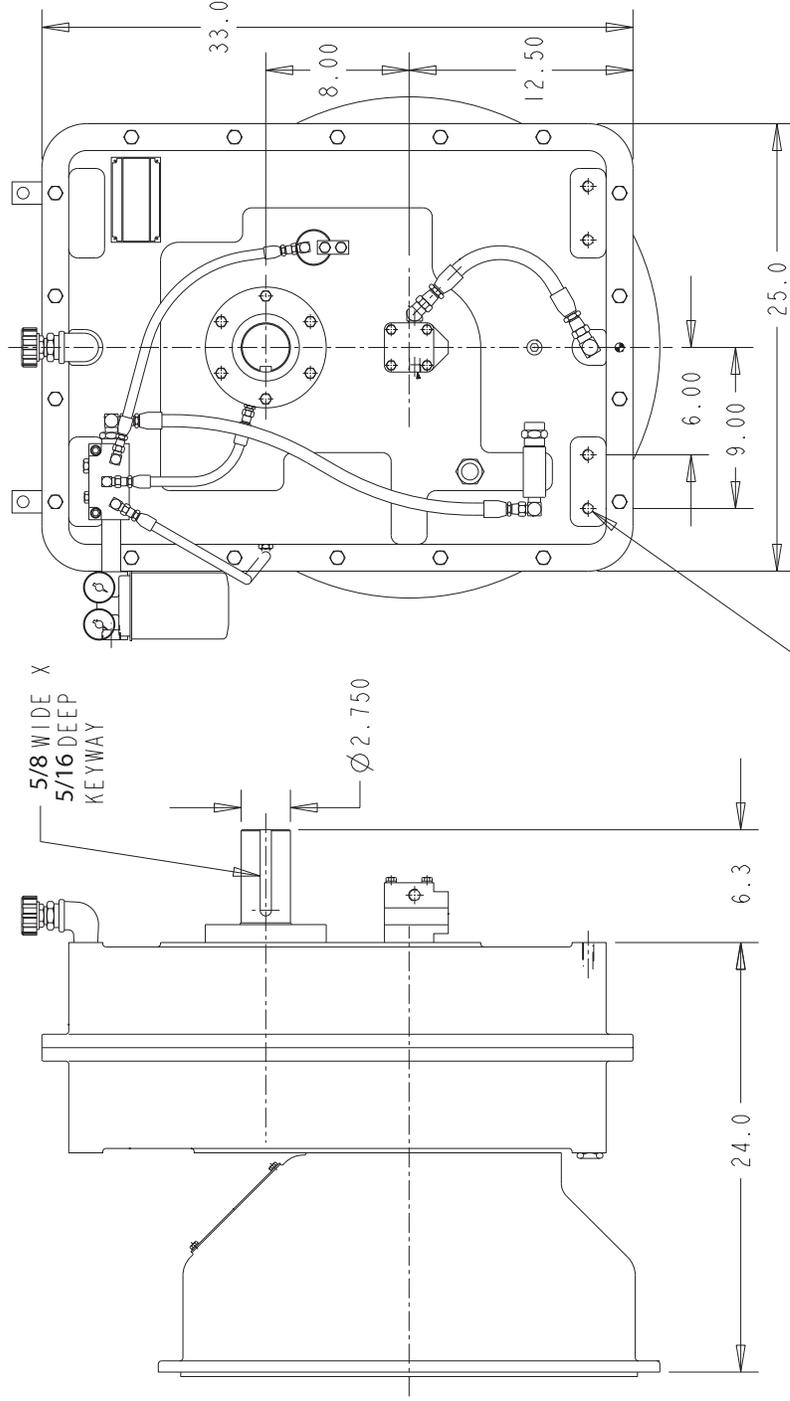
CAPACITY (nominal input torque):	1900 lb. ft.
MAXIMUM INPUT SPEED:	3000 RPM NOTE: with SP218 clutch - 2000 RPM with SP318 clutch - 2350 RPM
MAXIMUM OUTPUT SPEED:	6000 RPM
RATIOS:	1.38, 1.67, 2.03, 2.26, 2.52, 3.00
BELL HOUSINGS:	SAE #0, #1
CLUTCHES:	SP314, SP218, SP318 and 14" and 18" rubber block drives
OUTPUT SHAFT:	2.750" diameter with 5/8 x 5/16 keyway
REAR SUPPORT:	4 holes 5/8-11 on rear cover for customers support plate
LUBRICATION:	ISO Viscosity Grade 68 Lube pump and filter furnished
COOLING:	Heat exchanger is furnished (loose)
WEIGHT:	1185 lbs

Note: The output shaft can be located at 6 o'clock (below the input shaft) or at the 12 o'clock (above the input shaft) positions.

MODEL SJ3E SPEED INCREASER

BELLHSG SAE #	DIM A
#1	22.75
#0	26.25

OUTPUT CAN BE ORIENTED
AT 3, 6, 9, OR 12 O'CLOCK POSITION
CONTACT COTTA FOR MOUNTING HOLE LOCATION



5/8-11 UNC THREAD
TYP (4)
FOR GEARBOX MOUNTING

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MODEL GO1700A
SPEED INCREASER

Model GO1700A is a heavy duty independently mounted speed increaser having anti-engine rotation. The gears are helical, carburized and precision ground for increased strength and quiet operation. The bearings are tapered roller. The case is stress relieved, fabricated steel.

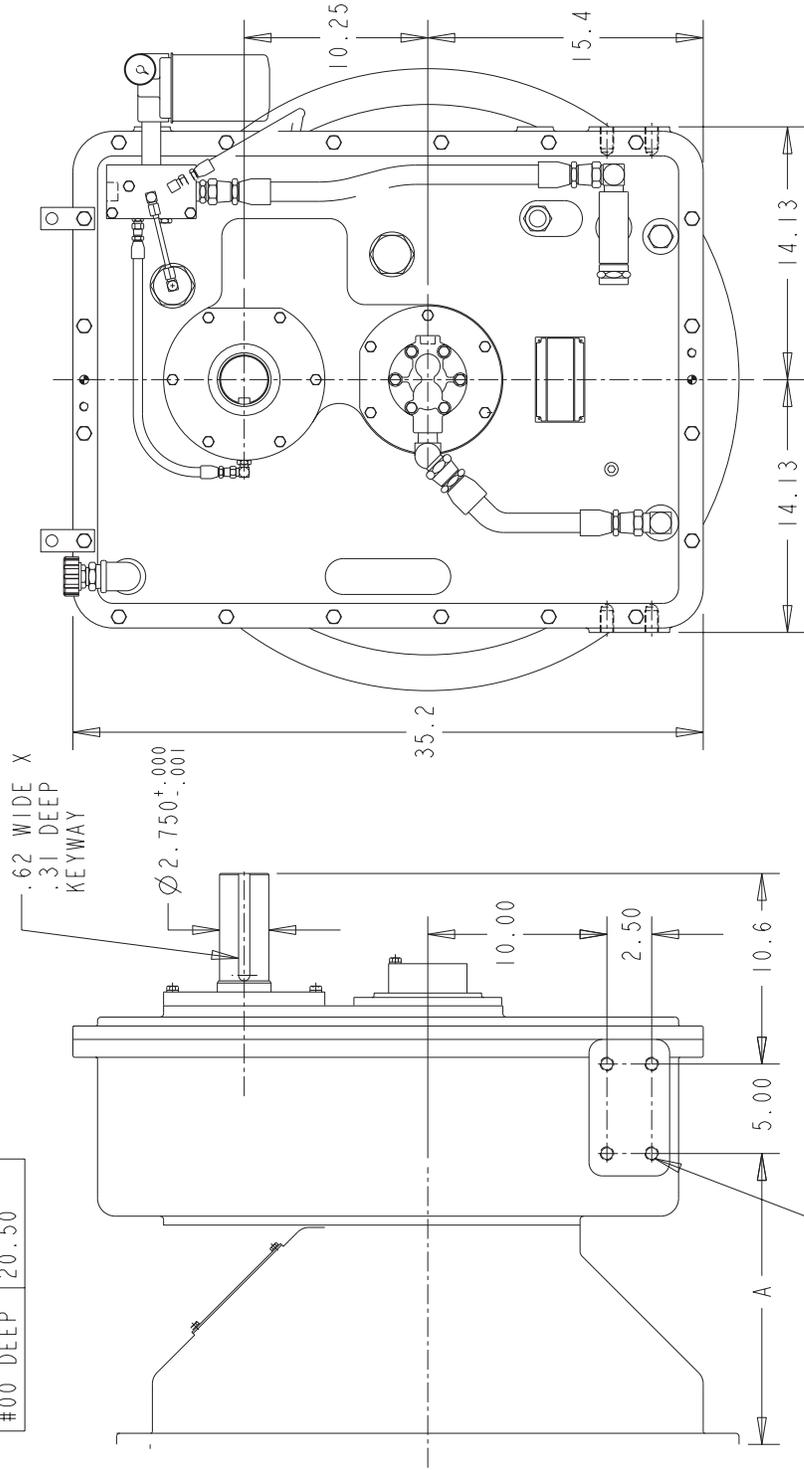
CAPACITY:	5500 ft. lbs.
MAXIMUM INPUT SPEED:	2500 RPM
MAXIMUM OUTPUT SPEED:	5500 RPM
RATIOS:	1.42, 1.67, 1.76, 1.96, 2.20, 2.48, 2.76, 3.0
INPUT HOUSINGS:	SAE #0, #00
INPUT CLUTCH:	Overcenter type clutches, rubber block drives or couplings to fit various engines.
OUTPUT SHAFT:	2.750" diameter x 6.0" long with 5/8W x 15/16D keyway.
OUTPUT SHAFT LOCATIONS:	12 o'clock- output is above input 6 o'clock- output is below input 9 o'clock- output is to left of input
LUBRICATION REQUIREMENT:	Lube pump furnished for oil spray on bearings and gears.
COOLING:	Heat exchanger furnished
ACCESSORIES FURNISHED:	Oil level sight gauge, filter, temperature/pressure switch relief valve
OPTIONS:	Stub input shaft 4.000" diameter x 6" long 1" W x 1/2D
WEIGHT:	1900 lbs

07/31/03

MODEL GO1700A SPEED INCREASER

BELLHSG SAE #	DIM A
#1	15.00
#0	16.25
#0 DEEP	18.50
#00	16.25
#00 DEEP	20.50

MODEL ALSO AVAILABLE WITH OUTPUT
AT 3, 6, OR 9 O'CLOCK POSITION
CONTACT COTTA FOR MORE INFORMATION



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MODEL GO1700E
SPEED INCREASER

Model GO1700E is a heavy duty independently mounted speed increaser having engine rotation. The gears are helical, carburized and precision ground for increased strength and quiet operation. The bearings are tapered roller. The case is stress relieved, fabricated steel.

Text

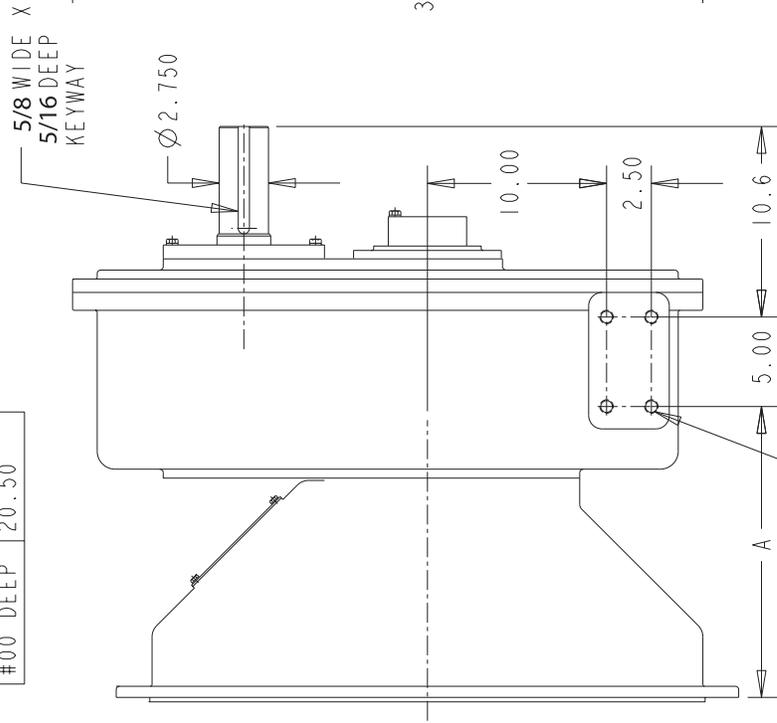
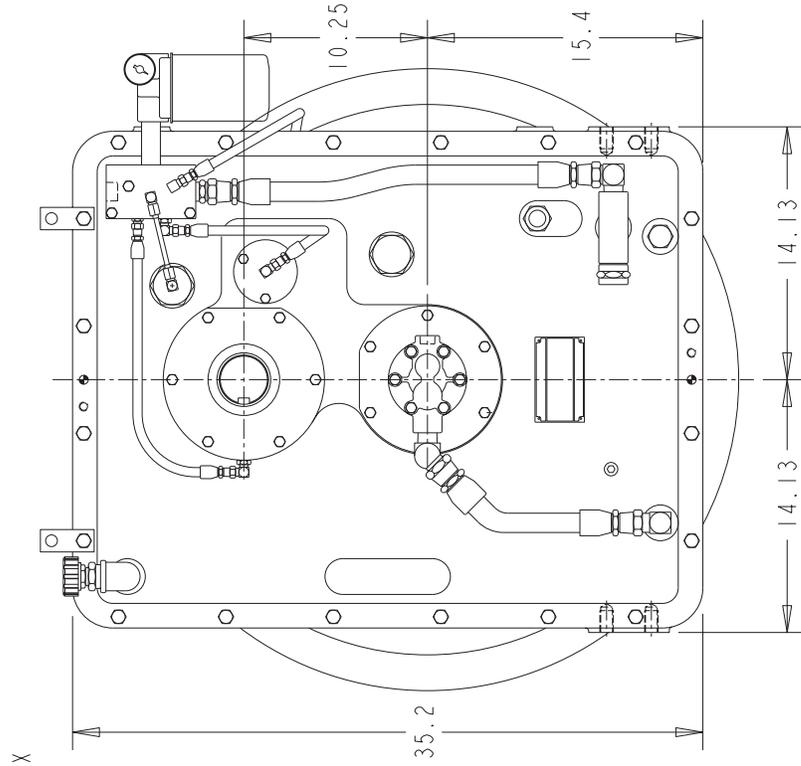
CAPACITY:	5500 ft.lbs.
MAXIMUM INPUT SPEED:	2500 RPM
MAXIMUM OUTPUT SPEED:	5500 RPM
RATIOS:	1.27, 1.68, 2.0, 2.26, 2.57, 2.75, 2.95
INPUT HOUSINGS:	SAE #0, #00
INPUT CLUTCH:	Overcenter type clutches, rubber block drives or couplings to fit various engines.
OUTPUT SHAFT:	2.750" diameter x 6.0" long with 5/8W x 15/16D keyway.
OUTPUT SHAFT LOCATIONS:	12 o'clock- output is above input 6 o'clock- output is below input 9 o'clock- output is to left of input
LUBRICATION REQUIREMENT:	Lube pump furnished for oil spray on bearings and gears.
COOLING:	Heat exchanger furnished
ACCESSORIES FURNISHED:	Oil level sight gauge, filter, temperature/pressure switch relief valve
OPTIONS:	Stub input shaft 4.000" diameter x 6" long 1" W x 1/2D
WEIGHT:	1900 lbs

07/31/03

MODEL GO1700E SPEED INCREASER

BELLHSG SAE #	DIM A
#1	15.00
#0	16.25
#0 DEEP	18.50
#00	16.25
#00 DEEP	20.50

MODEL ALSO AVAILABLE WITH OUTPUT
AT 3, 6, OR 9 O'CLOCK POSITION
CONTACT COTTA FOR MORE INFORMATION



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MODEL GOR1700A
SPEED INCREASER

Model GOR1700A is a heavy duty independently mounted speed increaser having anti-engine rotation. The gears are helical, carburized and precision ground for increased strength and quiet operation. The bearings are tapered roller. The case is stress relieved, fabricated steel.

CAPACITY:	<u>INPUT SPEED</u>	<u>HP</u>
	1200	1400
	1800	1850
	2000	2000
	2200	2200
	2500	2350

NOTE: Capacities are in horsepower and are based upon 10,000 hours B-10 bearing life.

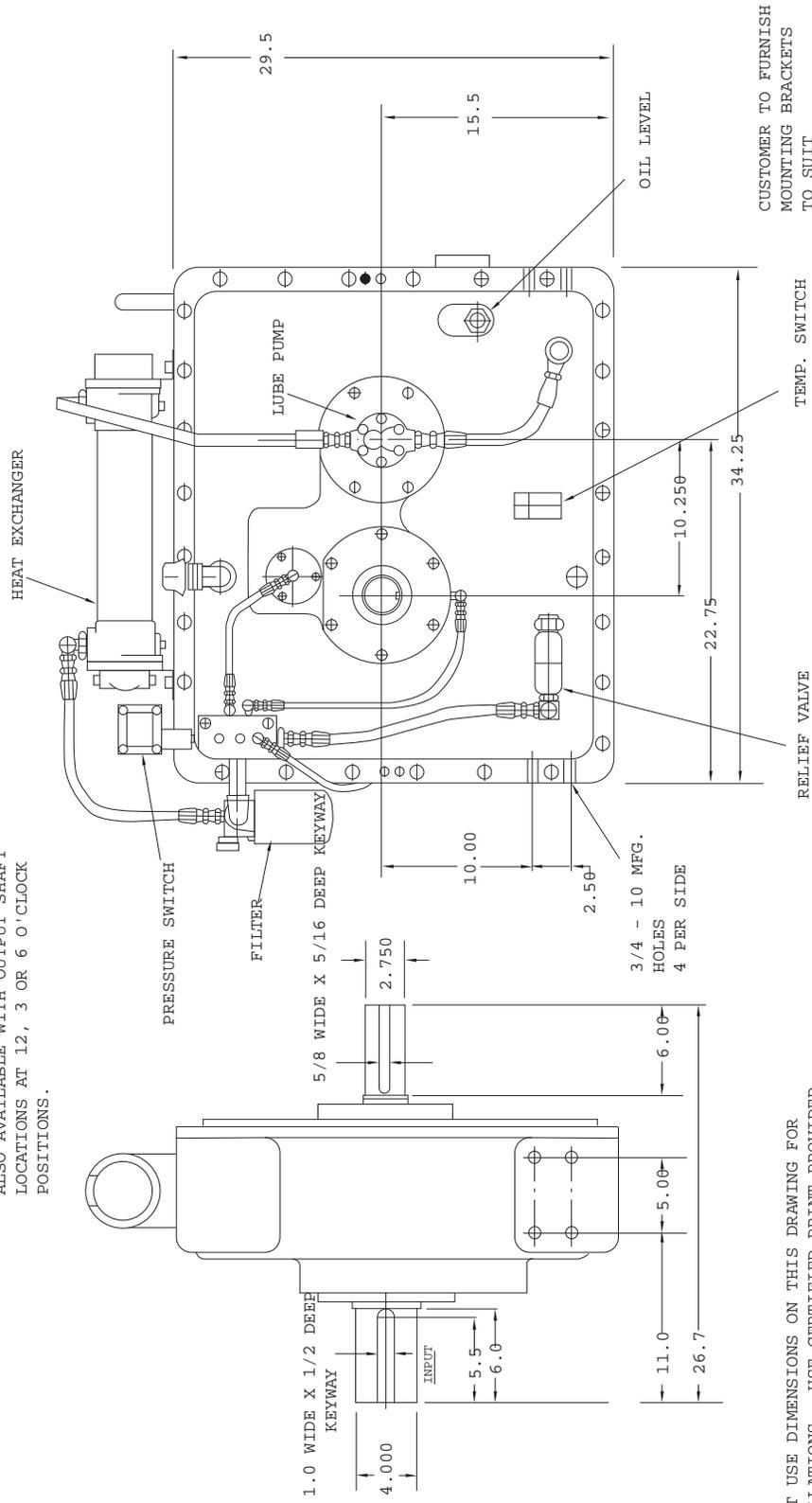
MAXIMUM INPUT SPEED:	2500 RPM
MAXIMUM OUTPUT SPEED:	5500 RPM
RATIOS:	1.42, 1.59, 1.67, 1.76, 1.96, 2.20, 2.48, 2.76, 3.0
INPUT SHAFT:	4.000" Dia. x 6.0" long with 1" wide x .50" deep keyway.
OUTPUT SHAFT:	2.750" Dia. x 6.0" long with .625 wide x .31 deep keyway.
OUTPUT SHAFT LOCATIONS:	12 o'clock - output is above input 6 o'clock - output is below input 9 o'clock - output is to left of input when viewed from rear.
LUBRICATION:	Lube pump furnished for oil spray on bearings and gears.
COOLING:	Heat exchanger furnished
ACCESSORIES FURNISHED:	Oil level sight gauge Filter Temperature/Pressure switch Relief Valve

NOTE: Mounting brackets are not furnished as standard equipment. Customer to furnish brackets to suit installation.

07/31/03

MODEL GOR1700A SPEED INCREASER

OUTPUT SHAFT SHOWN AT 9 O'CLOCK
(TO LEFT OF INPUT SHAFT).
ALSO AVAILABLE WITH OUTPUT SHAFT
LOCATIONS AT 12, 3 OR 6 O'CLOCK
POSITIONS.



DO NOT USE DIMENSIONS ON THIS DRAWING FOR
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CUSTOMER TO FURNISH
MOUNTING BRACKETS
TO SUIT

MODEL GOR1700E
SPEED INCREASER

Model GOR1700E is a heavy duty independently mounted speed increaser having engine rotation. The gears are helical, carburized and precision ground for increased strength and quiet operation. The bearings are tapered roller. The case is stress relieved, fabricated steel.

CAPACITY:	<u>INPUT SPEED</u>	<u>HP</u>
	1200	1400
	1800	1850
	2000	2000
	2200	2200
	2500	2350

NOTE: Capacities are in horsepower and are based upon 10,000 hours B-10 bearing life.

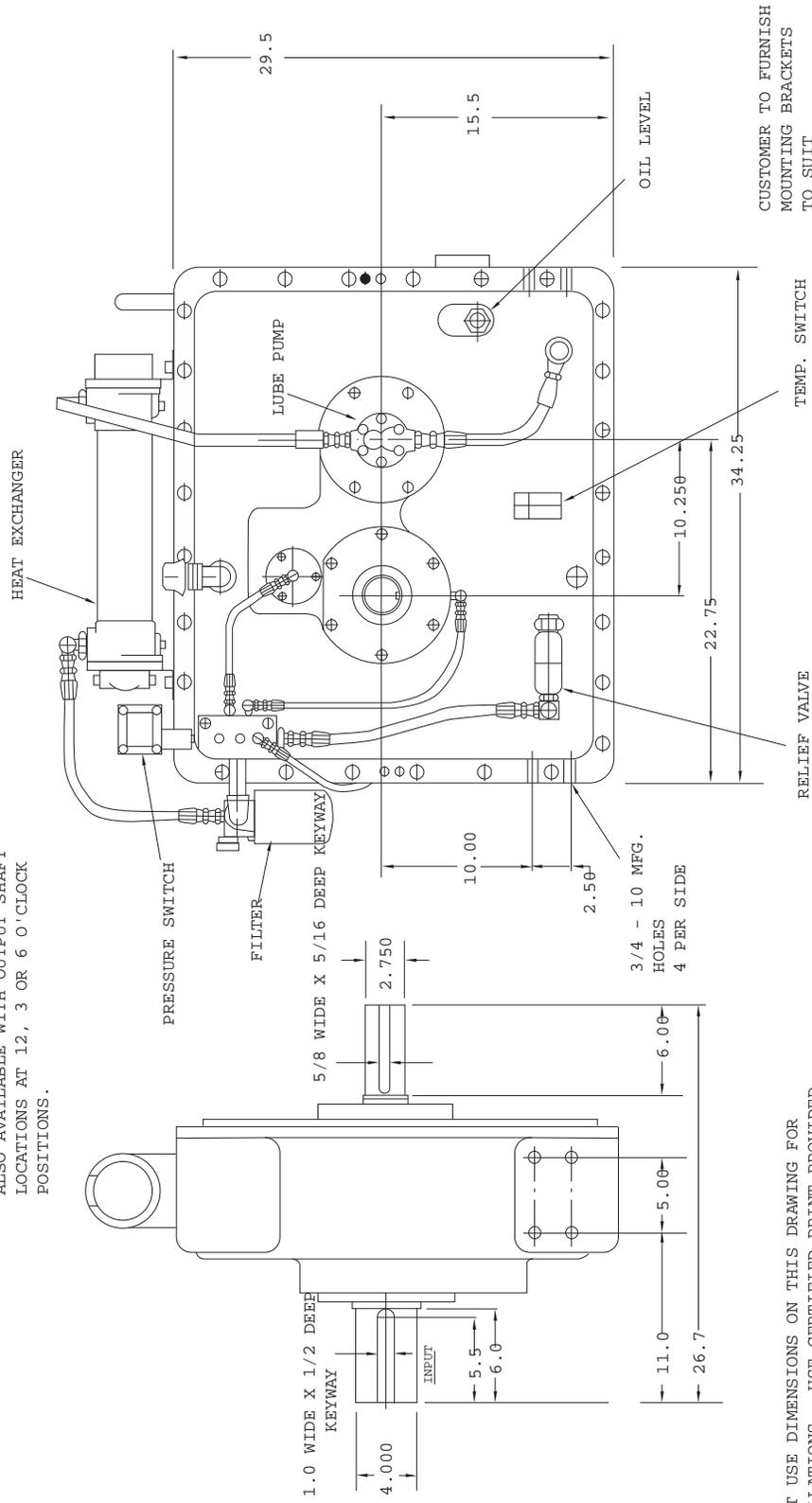
MAXIMUM INPUT SPEED:	2500 RPM
MAXIMUM OUTPUT SPEED:	5500 RPM
RATIOS:	1.27, 1.59, 1.68, 1.78, 2.0, 2.26, 2.57, 2.75, 2.95, 3.11
INPUT SHAFT:	4.000" Dia. x 6.0" long with 1" wide x .50" deep keyway.
OUTPUT SHAFT:	2.750" Dia. x 6.0" long with .625 wide x .31 deep keyway.
OUTPUT SHAFT LOCATIONS:	12 o'clock - output is above input 6 o'clock - output is below input 9 o'clock - output is to left of input when viewed from rear.
LUBRICATION:	Lube pump furnished for oil spray on bearings and gears.
COOLING:	Heat exchanger furnished
ACCESSORIES FURNISHED:	Oil level sight gauge Filter Temperature/Pressure switch Relief Valve

NOTE: Mounting brackets are not furnished as standard equipment. Customer to furnish brackets to suit installation.

07/31/03

MODEL GOR1700E SPEED INCREASER

OUTPUT SHAFT SHOWN AT 9 O'CLOCK
(TO LEFT OF INPUT SHAFT).
ALSO AVAILABLE WITH OUTPUT SHAFT
LOCATIONS AT 12, 3 OR 6 O'CLOCK
POSITIONS.



DO NOT USE DIMENSIONS ON THIS DRAWING FOR
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CUSTOMER TO FURNISH
MOUNTING BRACKETS
TO SUIT

MODEL GO1901A
SPEED INCREASER

Model GO1901A is a heavy duty speed increaser with anti-engine rotation. The gears are helical, carburized to RC 59-61 and are precision ground to AGMA class Q-12 for increased strength and quiet operation. The bearings are tapered roller. The case is stress relieved, fabricated steel.

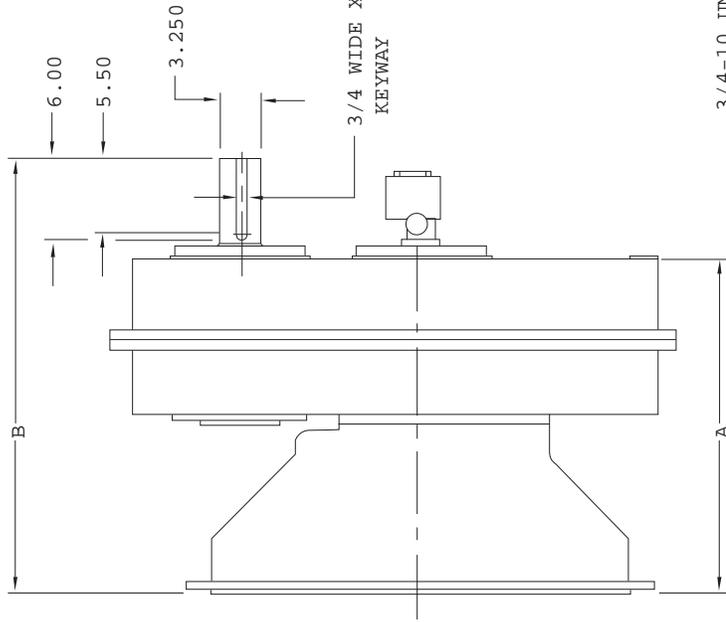
This model is available with a SAE bell housing and clutch (or rubber block drive or coupling) for unit mounting to an engine. It can also be furnished with a stub input shaft for independent mounting.

CAPACITY:	7900 ft. lbs
MAXIMUM INPUT SPEED:	2500 RPM
MAXIMUM OUTPUT SPEED:	4800 RPM
RATIOS:	1.28, 1.54, 1.97, 2.54, 2.967, 3.52, 4.0, 4.24, 5.0
INPUT HOUSINGS:	SAE #0, #00
INPUT CLUTCHES:	Over center type clutches, rubber block drives or couplings to fit various engine fly-wheels.
OUTPUT SHAFT:	3.25" diameter x 6.0" long with .75 x .375 keyway
OUTPUT SHAFT LOCATION:	12 o'clock - output is above the input shaft when viewed from rear
LUBRICATION:	Lube pump is furnished for oil spray on bearings and gear. Sump is in case.
COOLING:	Heat exchanger is furnished
ACCESSORIES FURNISHED:	Oil level sight gauge, filter, temperature/pressure switch, relief valve
OPTIONS:	Stub input shaft 4.500" diameter x 6" long with a 1" wide x 1/2" deep keyway when independently mounted
WEIGHT:	2100 lbs

07/31/03

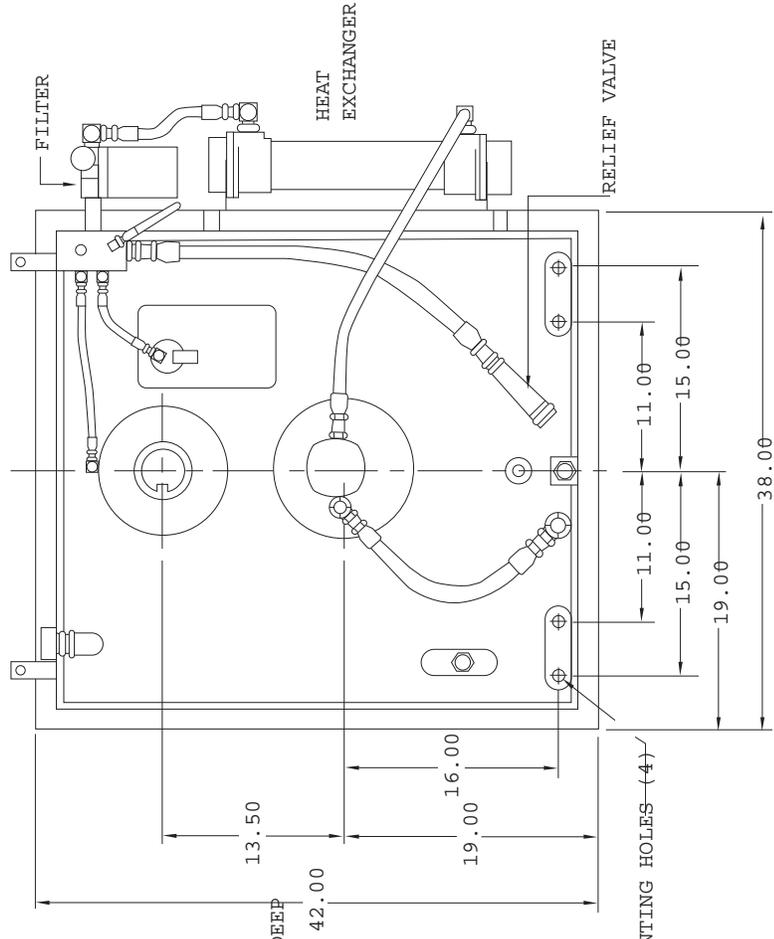
MODEL GO1901A SPEED INCREASER

INPUT HOUSING	A	B	CLUTCH SIZE
SAE #1	23.50	30.65	SP314, IBF214
SAE #0	24.75	31.90	SP218
SAE #0	27.00	34.15	SP318
SAE #00	29.00	36.15	SP 321
SAE #00	24.75	31.90	21" R.B.D.



CUSTOMER TO FURNISH MOUNTING BRACKETS TO SUIT.

DO NOT USE DIMENSIONS ON THIS DRAWING FOR INSTALLATIONS. USE CERTIFIED PRINT PROVIDED WITH ORDERS



MODEL GO1901E
SPEED INCREASER

Model GO1901E is a heavy duty speed increaser with engine rotation. The gears are helical, carburized to RC 59-61 and are precision ground to AGMA class Q-12 for increased strength and quiet operation. The bearings are tapered roller. The case is stress relieved, fabricated steel.

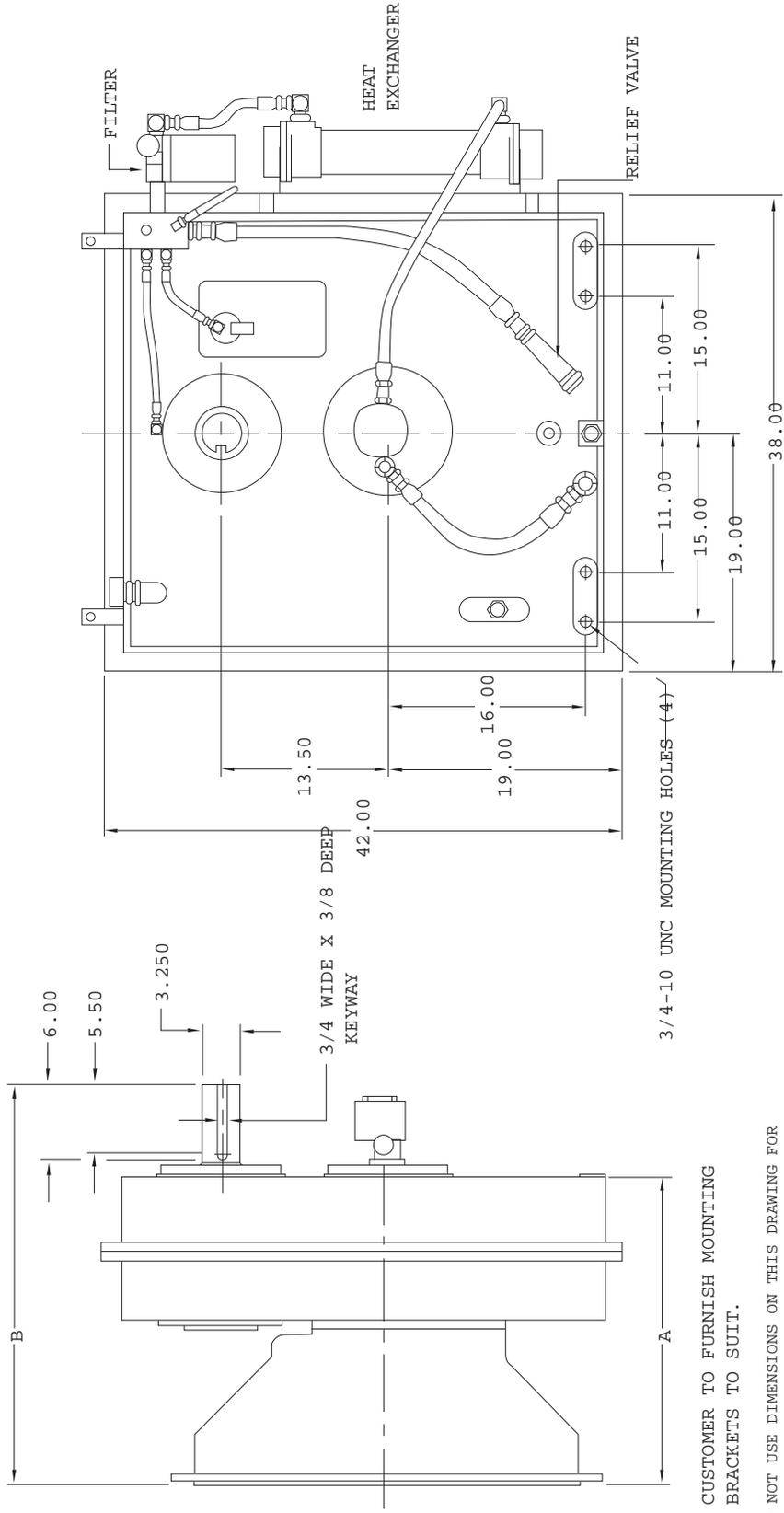
This model is available with a SAE bell housing and clutch (or rubber block drive or coupling) for unit mounting to an engine. It can also be furnished with a stub input shaft for independent mounting.

CAPACITY:	7900 ft. lbs
MAXIMUM INPUT SPEED:	2500 RPM
MAXIMUM OUTPUT SPEED:	4800 RPM
RATIOS:	1.27, 1.54, 1.76, 1.95, 2.43, 3.10, 3.54, 4.08, 4.52, 5.05
INPUT HOUSINGS:	SAE #0, #00
INPUT CLUTCHES:	Over center type clutches, rubber block drives or couplings to fit various engine flywheels.
OUTPUT SHAFT:	3.25" diameter x 6.0" long with .75 x .375 keyway
OUTPUT SHAFT LOCATION:	12 o'clock - output is above the input shaft when viewed from rear
LUBRICATION:	Lube pump is furnished for oil spray on bearings and gear. Sump is in case.
COOLING:	Heat exchanger is furnished
ACCESSORIES FURNISHED:	Oil level sight gauge, filter, temperature/pressure switch, relief valve
OPTIONS:	Stub input shaft 4.500" diameter x 6" long with a 1" wide x 1/2" deep keyway when independently mounted
WEIGHT:	2100 lbs

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MODEL GO1901E SPEED INCREASER

INPUT HOUSING	A	B	CLUTCH SIZE
SAE #1	23.50	30.65	SP314, IBF214
SAE #0	24.75	31.90	SP218
SAE #0	27.00	34.15	SP318
SAE #00	29.00	36.15	SP 321
SAE #00	24.75	31.90	21" R.B.D.



CUSTOMER TO FURNISH MOUNTING
BRACKETS TO SUIT.

DO NOT USE DIMENSIONS ON THIS DRAWING FOR
INSTALLATIONS. USE CERTIFIED PRINT PROVIDED
WITH ORDERS

MODEL GO1945A
SPEED INCREASER

Model GO1945A is a heavy duty speed increaser having anti-engine rotation. The gears are helical, carburized to Rc 59-61 and are precision ground to AGMA class Q-12 for increased strength and quiet operation. The bearings are tapered roller. The case is stress relieved, fabricated steel.

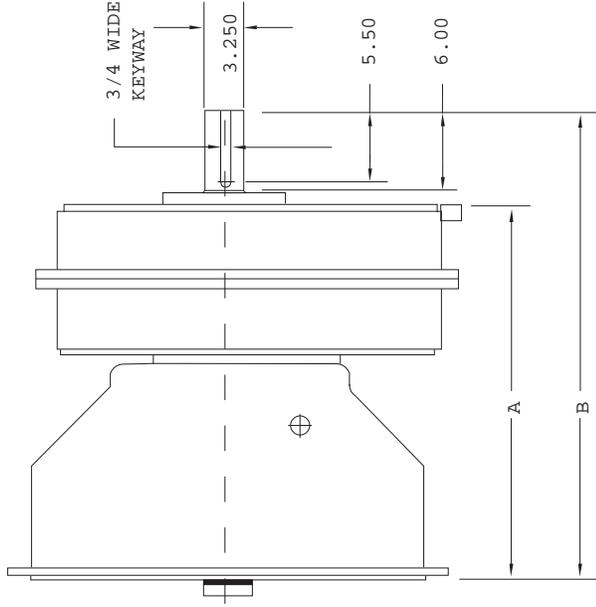
This model is available with a SAE bell housing and clutch (or rubber block drive or coupling) for unit mounting to an engine. It can also be furnished with a stub input shaft for independent mounting.

CAPACITY:	7900 ft. lbs.
MAXIMUM INPUT SPEED:	2500 RPM
MAXIMUM OUTPUT SPEED:	4800 RPM
RATIOS:	3.52, 4.24, 5.0
INPUT HOUSINGS:	SAE #0, #00
INPUT CLUTCHES:	Overcenter type clutches, rubber block drives or couplings to fit various engine flywheels
OUTPUT SHAFT:	3.25" diameter x 6.0" long with .75 x .375 keyway
OUTPUT SHAFT LOCATION:	9 o'clock - output is to left of input when viewed from rear
LUBRICATION REQUIREMENT:	Lube pump is furnished for oil spray on bearings and gear. Sump is in case.
COOLING:	Heat exchanger furnished
ACCESSORIES FURNISHED:	Oil level sight gauge, filter, temperature/pressure switch, relief valve
OPTIONS:	Stub input shaft 4.500" diameter x 6" long with a 1" wide x 1/2" deep keyway when independently mounted
WEIGHT:	2450 lbs

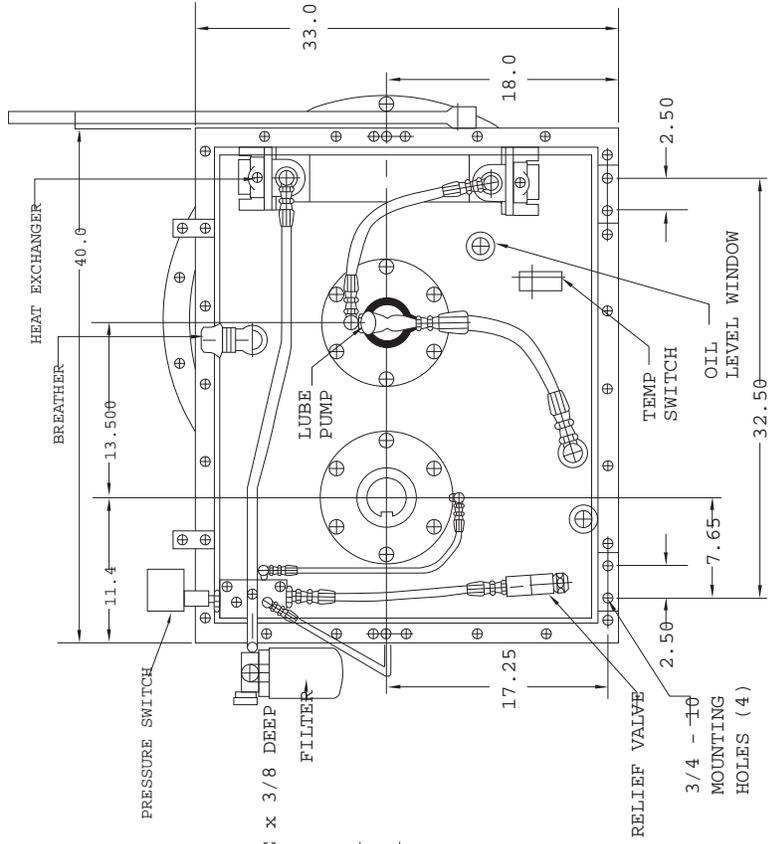
07/31/03

MODEL G01945A SPEED INCREASER

INPUT HOUSING	A	B	CLUTCH SIZE
SAE #1	23.50	30.65	SP314, IBF214
SAE #0	24.75	31.90	SP218
SAE #0	27.00	34.15	SP318
SAE #00	29.00	36.15	SP 321
SAE #00	24.75	31.90	21" R.B.D.



OUTPUT SHAFT SHOWN AT 9 O'CLOCK
(TO LEFT OF INPUT SHAFT)



DO NOT USE DIMENSIONS ON THIS DRAWING FOR INSTALLATIONS. USE CERTIFIED PRINT PROVIDED WITH ORDER.

CUSTOMER TO FURNISH MOUNTING BRACKETS TO SUIT.

MODEL GO1945E
SPEED INCREASER

Model GO1945E is a heavy duty speed increaser having engine rotation. The gears are helical, carburized to Rc 59-61 and are precision ground to AGMA class Q-12 for increased strength and quiet operation. The bearings are tapered roller. The case is stress relieved, fabricated steel.

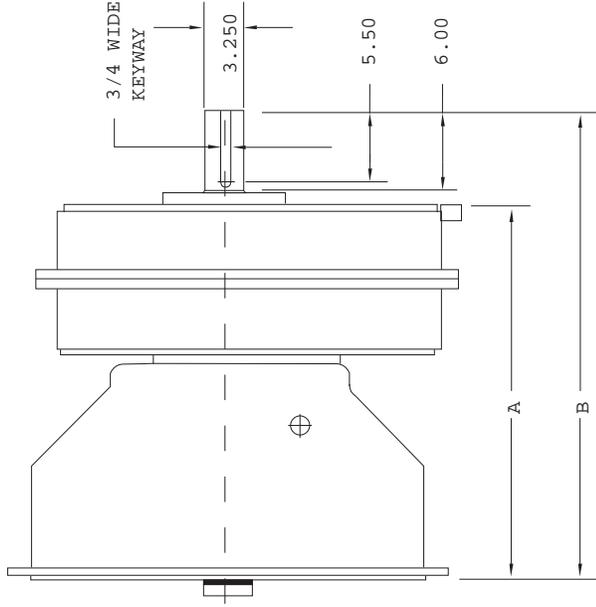
This model is available with a SAE bell housing and clutch (or rubber block drive or coupling) for unit mounting to an engine. It can also be furnished with a stub input shaft for independent mounting.

CAPACITY:	7900 ft. lbs.
MAXIMUM INPUT SPEED:	2500 RPM
MAXIMUM OUTPUT SPEED:	4800 RPM
RATIOS:	1.28, 1.54, 1.75, 1.97, 2.54, 2.97
INPUT HOUSINGS:	SAE #0, #00
INPUT CLUTCHES:	Overcenter type clutches, rubber block drives or couplings to fit various engine flywheels
OUTPUT SHAFT:	3.25" diameter x 6.0" long with .75 x .375 keyway
OUTPUT SHAFT LOCATION:	9 o'clock - output is to left of input when viewed from rear
LUBRICATION REQUIREMENT:	Lube pump is furnished for oil spray on bearings and gear. Sump is in case.
COOLING:	Heat exchanger furnished
ACCESSORIES FURNISHED:	Oil level sight gauge, filter, temperature/pressure switch, relief valve
OPTIONS:	Stub input shaft 4.500" diameter x 6" long with a 1" wide x 1/2" deep keyway when independently mounted
WEIGHT:	2450 lbs

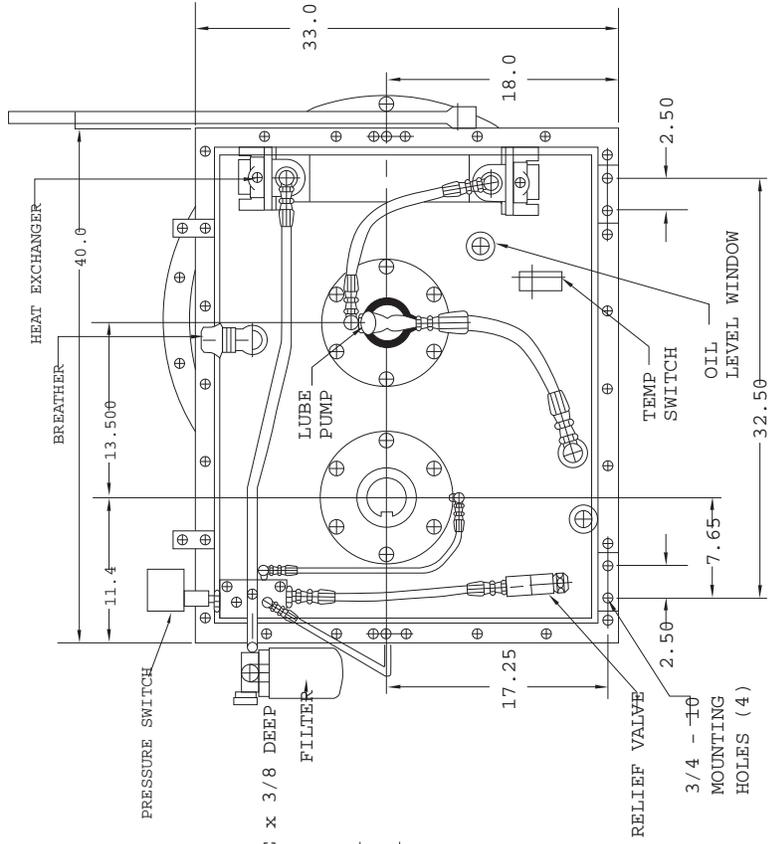
07/31/03

MODEL G01945E SPEED INCREASER

INPUT HOUSING	A	B	CLUTCH SIZE
SAE #1	23.50	30.65	SP314, IBF214
SAE #0	24.75	31.90	SP218
SAE #0	27.00	34.15	SP318
SAE #00	29.00	36.15	SP 321
SAE #00	24.75	31.90	21" R.B.D.



OUTPUT SHAFT SHOWN AT 9 O'CLOCK
(TO LEFT OF INPUT SHAFT)



DO NOT USE DIMENSIONS ON THIS DRAWING FOR
INSTALLATIONS. USE CERTIFIED PRINT PROVIDED
WITH ORDER.

CUSTOMER TO FURNISH MOUNTING
BRACKETS TO SUIT.

MODEL SIR2A
SPEED INCREASER

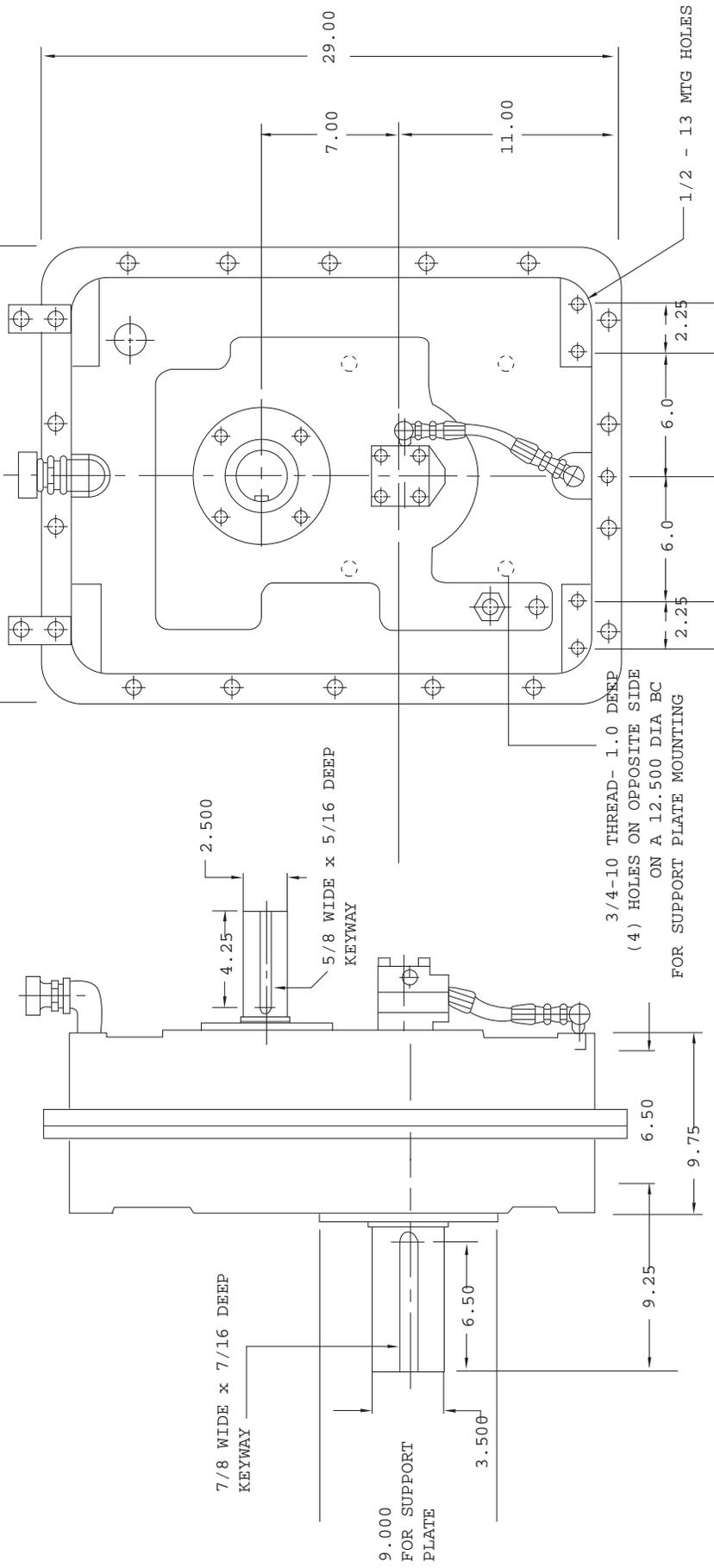
Model SIR2A is an independently mounted speed increaser that is available in a variety of ratios. Model SIR2A has two gears resulting in output rotation opposite input. The gears are helical, carburized, and are precision ground. The bearings are taper roller and the case is cast iron.

CAPACITY (nominal input torque):	1450 lb. ft. (See SI2A capacity curve)
MAXIMUM INPUT SPEED:	3600 RPM
MAXIMUM OUTPUT SPEED:	4800 RPM
RATIOS:	1.20, 1.50, 1.68, 1.75, 1.97, 2.24, 2.55
INPUT SHAFT:	3.500 diameter by 7" long with 7/8 x 7/16 keyway
OUTPUT SHAFT:	2.50" diameter by 5.25" long with 5/8 x 5/16 keyway
CENTER DISTANCE:	7.000"
LUBRICATION:	ISO Viscosity Grade 68, AGMA #2 Lube pump and filter are furnished
COOLING:	A lube type heat exchanger is furnished (shipped loose). If cooling water is not available a radiator can be furnished (contact Cotta for additional information)
MOUNTING:	There is a pilot and 4 drilled and tapped holes on the front of the case for mounting purposes. Mounting bracket is not furnished and is to be fabricated to suit application.
WEIGHT:	725 lbs

07/31/03

MODEL SIR2A SPEED INCREASER

OUTPUT SHAFT SHOWN AT 12 O'CLOCK
(ABOVE THE INPUT SHAFT).
ALSO AVAILABLE WITH OUTPUT SHAFT
LOCATIONS AT 3, 6 OR 9 O'CLOCK
POSITIONS.



DO NOT USE DIMENSIONS ON THIS DRAWING FOR
INSTALLATIONS. USE CERTIFIED PRINT PROVIDED
WITH ORDERS

CUSTOMER TO FURNISH
MOUNTING BRACKETS TO SUIT

MODEL SIR3A
SPEED INCREASER

Model SIR3A is a heavy duty independently mounted speed increaser having anti-engine rotation. It is available with a variety of ratios. The gears are helical, carburized and precision ground and are per AGMA Q-12. The bearings are taper roller throughout. The case is heavy cast iron.

CAPACITY (nominal input torque):	2000 lb. ft. (See SI3A capacity curve)
MAXIMUM INPUT SPEED:	3000 RPM
MAXIMUM OUTPUT SPEED:	6000 RPM
RATIOS:	1.21, 1.39, 1.50, 1.66, 2.0, 2.21, 2.44, 3.04
INPUT SHAFT:	4.25 diameter with 1 x 1.2 k.w. x 8.5 long
OUTPUT SHAFT:	2.75" diameter with 5/8 x 5/16 keyway
CENTER DISTANCE:	8.000"
REAR SUPPORT:	4 holes 5/8-11 on rear cover for customers support plate
LUBRICATION:	ISO Viscosity Grade 68, 31 quarts Lube pump and filter are furnished
COOLING:	Heat exchanger is furnished (loose)
MOUNTING:	There is a pilot and 4 drilled and tapped holes on the front of the case for mounting.
WEIGHT:	900 lbs

07/31/03