

P.T.O. QUICK REFERENCE GUIDE P-73B

AUGUST, 1972

SUPERSEDES P-69



POWER TAKE-OFFS

GENERAL
INFORMATION
SECTION



QUICK REFERENCE CONTENTS

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IMPORTANT NOTICE

The data listed herein is correct to the best of our knowledge and belief, having been compiled from reliable and official sources of information. However, WE CANNOT ASSUME ANY RESPONSIBILITY for possible error.

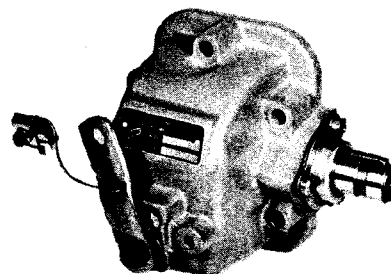
CHELSEA POWER TAKE-OFFS

FOR LIGHT OR HEAVY DUTY OPERATION E-Z SHIFT POSITIVE LOCK WIRE CONTROL SHIFTABLE INPUT GEAR

For use with hydraulic pumps, tail gates, dump bodies and other single speed applications. This unit has a sturdy cast iron housing casting and is available with needle bearings. It also features special ball bearing thrust washers to absorb maximum thrust loads.

STANDARD OUTPUT SHAFT SIZE 7/8"
NEEDLE BEARING TORQUE RATING:
125 FT. LBS. INTERMITTENTLY.

A1-2-3W SERIES (SINGLE SPEED—ONE GEAR)



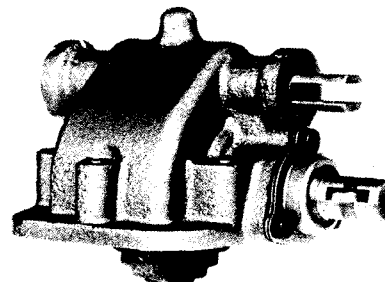
	Horsepower
Horsepower rating for intermittent service at—	
500 RPM of output shaft	11.9
1000 RPM of output shaft	23.5

FOR HEAVY DUTY OPERATION LEVER CONTROL THESE UNITS ARE ALSO AVAILABLE IN KIT FORM SHIFTABLE INPUT GEAR

You can reduce your inventory by stocking Housing Kits and Gear and Shaft Kits. In only a few minutes time, you can assemble these kits into any desired single gear P.T.O.

STANDARD OUTPUT SHAFT SIZE 7/8"
TORQUE RATING: 125 FT. LBS. INTERMITTENTLY.

A1-2-3Y SERIES (SINGLE SPEED—ONE GEAR)



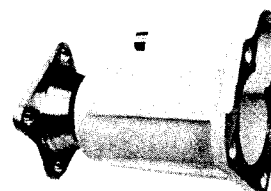
	Horsepower
Horsepower rating for intermittent service at—	
500 RPM of output shaft	11.9
1000 RPM of output shaft	23.5

FOR EXTRA HEAVY DUTY OPERATION

Designed for extra heavy duty service, mounts on the rear of the Spicer models 23 and 24 and Napco Transfer Cases. Does not reduce ground clearance. With main transmission in direct drive, this P.T.O. with heavy ball bearings will deliver full engine torque. All transmission speeds, including reverse, are available thru the P.T.O. Comes complete with a Spicer 1260 Series companion flange.

**ALL TRANSMISSION RATIOS ARE AVAILABLE
THROUGH GEAR BOX**

2T SERIES (ONE SPEED—REAR MOUNTING)

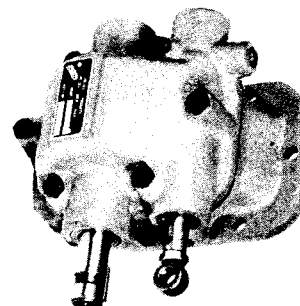


FOR LIGHT AND MEDIUM DUTY OPERATION LEVER CONTROL CONSTANT MESH INPUT GEAR

An economical two gear P.T.O. designed with a separate offset base section for easy installation and to clear mounting obstructions. This P.T.O. is available in high, medium, or low speed ratios, and features a cast iron case with needle bearings.

STANDARD OUTPUT SHAFT SIZE 7/8"
TORQUE RATING:
85 FT. LBS. FOR INTERMITTENT SERVICE.

14 SERIES (SINGLE SPEED—TWO GEAR)

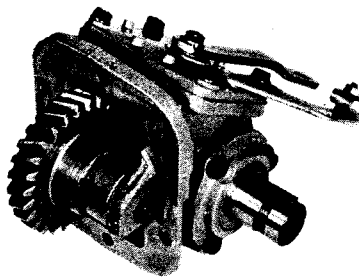


	Horsepower
Horsepower rating for intermittent service at—	
500 RPM of output shaft	8
1000 RPM of output shaft	16

CHELSEA POWER TAKE-OFFS

FOR HEAVY DUTY OPERATION CONSTANT MESH INPUT GEAR

15HFS SERIES (SINGLE SPEED-TWO GEAR)



This P.T.O. was designed specifically for the right side application on Clark Transmission Models 265V, 264V, 269V, 300V, etc. It eliminates the necessity of an adapter gear assembly and, therefore, makes an economical installation. For use with dump bodies, hydraulic pumps, transfer pumps and other equipment requiring one speed. Available in E-Z shift wire control or lever control. Holley governor drive available in standard shaft size only.

STANDARD OUTPUT SHAFT SIZE 1 1/4"

TORQUE RATING:

135 FT. LBS. FOR INTERMITTENT SERVICE.

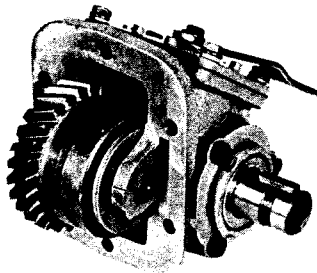
Horsepower rating for
intermittent service at—
500 RPM of output shaft
1000 RPM of output shaft

Horsepower

12.5
25

FOR EXTRA HEAVY DUTY OPERATION CONSTANT MESH INPUT GEAR

15HFT SERIES (SINGLE SPEED-TWO GEAR)



This unit will fit the same applications as the 15HFT. However, the extra large roller bearings supporting the input gear and output shaft makes this unit ideal for operation of garbage bodies and other heavy duty equipment. Available in E-Z shift wire or lever control. Holley governor drive also available, in standard shaft size only.

STANDARD OUTPUT SHAFT SIZE 1 1/4"

TORQUE RATING:

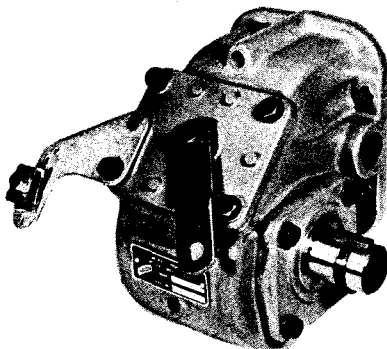
160 FT. LBS. FOR INTERMITTENT SERVICE.

Horsepower rating for
intermittent service at—
500 RPM of output shaft
1000 RPM of output shaft

Horsepower

15
30

A22 SERIES (LOW SPEED-TWO GEAR)



FOR EXTRA HEAVY DUTY OPERATION SHIFTABLE INPUT GEAR

This series is designed for low speed heavy duty single speed applications or to obtain normal speed ratios on extra fast transmissions. This unit features a full range of options including, wire control, level control, air shift, vac-u-matic shift, hydraulic shift, Holley governor drive, pressure lubrication, and pump flanges to fit most popular pumps, deep mount housings are also available.

STANDARD OUTPUT SHAFT SIZE 1 1/4"

TORQUE RATING:

**A22C-A22D - 200 LBS. FT. FOR INTERMITTENT SERVICE,
A22L - 250 LBS. FT. FOR INTERMITTENT SERVICE.**

Horsepower rating for
intermittent service at—
500 RPM of output shaft
1000 RPM of output shaft

C & D

L

19 23.5
38 47

CHELSEA POWER TAKE-OFFS

FOR EXTRA HEAVY DUTY OPERATION SHIFTABLE INPUT GEAR

This series is designed for use on Allison AT-540 and MT Series transmissions. It operates at 75% of torque converter output making an ideal application for garbage packers and other hydraulic pump mount applications. Standard model has wire control shifter, options include lever control shift, air shift, vac-u-matic shift, hydraulic shift, Holley governor drive, pump flanges to fit most popular pumps and pressure lubrication to be used when P.T.O. is mounted on automatic transmissions.

STANDARD OUTPUT SHAFT SIZE 1 1/4"
TORQUE RATING:
250 LB. FT. FOR INTERMITTENT SERVICE.

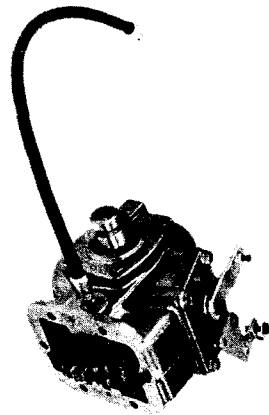
Horsepower

Horsepower rating for
intermittent service at—

500 RPM of output shaft
1000 RPM of output shaft

23.5
47

26 SERIES (EXTRA HIGH REDUCTION)



6 Bolt

FOR EXTRA HEAVY DUTY OPERATION INTERNAL HYDRAULIC SHIFT CONSTANT MESH INPUT

This series was designed for use on Allison automatic transmissions and can be shifted with engine running without disengaging transmission or gear clashing. It is supplied complete with remote mounted three way valve for easy shifting. Options include pump flanges for most popular hydraulic pumps and pressure lubrication.

STANDARD OUTPUT SHAFT SIZE 1 1/4"
TORQUE RATING:
250 LBS. FT. FOR INTERMITTENT SERVICE.

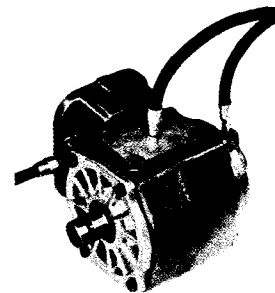
Horsepower

Horsepower rating for
intermittent service at—

500 RPM of output shaft
1000 RPM of output shaft

23.2
47

27 SERIES (POWER SHIFT- TWO GEAR)



6 Bolt

FOR HEAVY DUTY OPERATION CONSTANT MESH INPUT GEAR

Two speeds forward, one reverse heavy duty spur gear power take-off generally used to operate winches, post hole diggers or similar equipment. This series is available with top or side mounted shift rods. They are comparable in application to the S 32 series. Standard or optional output shafts are ball bearing supported. Input and countershaft gears are mounted on solid roller bearings. Only available in lever shift.

STANDARD OUTPUT SHAFT SIZE 1 1/4"
TORQUE RATING:
140 LBS. FT. FOR INTERMITTENT SERVICE.

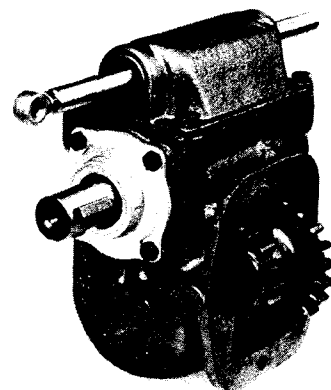
Horsepower

Horsepower rating for
intermittent service at—

500 RPM of output shaft
1000 RPM of output shaft

13.2
26.5

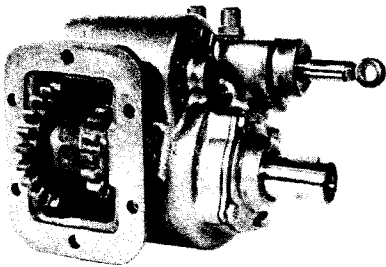
30 SERIES (TWO SPEED AND REVERSE)



6 Bolt

CHELSEA POWER TAKE-OFFS

S32-32 SERIES (TWO FORWARD AND ONE REVERSE)



6 Bolt

FOR HEAVY DUTY OPERATION **CONSTANT MESH INPUT GEAR**

S32 Series (Spur Gear) and 32 Series (Helical Gear) are generally used for winches, post hole diggers, and other applications requiring a multiple speed forward and also a reverse. Features a slant back design to clear mounting obstructions and heavy duty roller bearings.

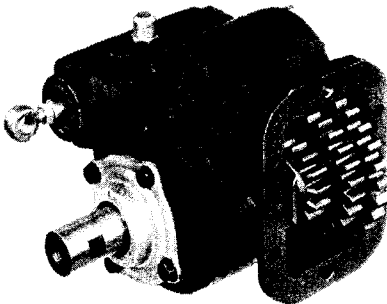
STANDARD OUTPUT SHAFT SIZE 1 1/4"
TORQUE RATING:
140 LBS. FT. FOR INTERMITTENT SERVICE.

Horsepower

Horsepower rating for
intermittent service at—
500 RPM of output shaft
1000 RPM of output shaft

13.2
26.5

34L SERIES (ONE EXTRA LOW SPEED FORWARD AND ONE SPEED REVERSE)



6 Bolt

CONSTANT MESH INPUT GEAR

Designed for high speed five and six pitch spur gear transmissions which drive winches up to 40,000 lbs. capacity, reversible product pumps, and dry bulk compressors. The Model 34L has a shift rod that is threaded at both ends allowing the eyebolt to be located to the front or rear. Also featured is a removable cover plate for easy accessibility to the input gear for backlash adjustment.

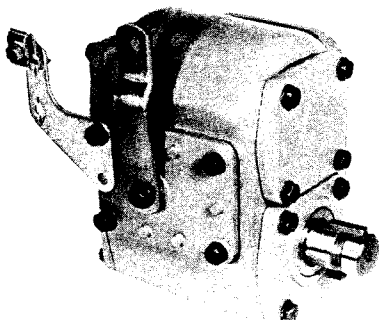
STANDARD OUTPUT SHAFT SIZE 1 1/4"
TORQUE RATING:
200 LBS. FT. FOR INTERMITTENT SERVICE.

Horsepower

Horsepower rating for
intermittent service at—
500 RPM of output shaft
1000 RPM of output shaft

19
38

S35-37, KIT 35 SERIES (ONE FORWARD AND ONE REVERSE)



6 Bolt

FOR HEAVY DUTY OPERATION **CONSTANT MESH INPUT GEAR**

Designed to operate winches, reversible pumps, etc. also designed with inventory economy in mind, with four different assemblies and 16 input gears it permits you to fit 95% of all truck transmissions. Standard model comes complete with wire control shifter. Options include lever control shifter, and Holley governor drive.

STANDARD OUTPUT SHAFT SIZE 1 1/4"
TORQUE RATING:
140 LBS. FT. FOR INTERMITTENT SERVICE.

Horsepower

Horsepower rating for
intermittent service at—
500 RPM of output shaft
1000 RPM of output shaft

13.2
26.5

CHELSEA POWER TAKE-OFFS

FOR HEAVY DUTY OPERATION WITH SINGLE SPEED ACCESSORY SHAFT CONSTANT MESH INPUT GEAR

Designed to operate two separate pieces of equipment, independently or simultaneously, from the same side of a transmission or a transmission having only one P.T.O. opening. Standard model has wire control shifter. Options include lever control, and Holley governor drive.

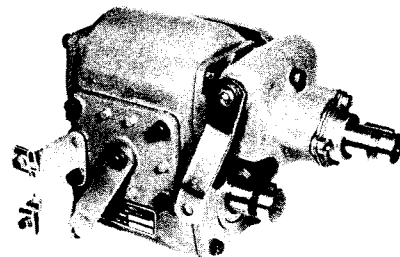
STANDARD OUTPUT SHAFT SIZE 1 1/4"
TORQUE RATING: 140 LBS. FT.

Horsepower rating for
intermittent service at—
500 RPM of output shaft
1000 RPM of output shaft

Horsepower

13.2
26.5

SR 35-37 KIT R35 SERIES (ONE SPEED FORWARD AND REVERSE)



6 Bolt

FOR HEAVY DUTY OPERATION SHIFTABLE INPUT GEAR

Designed to operate heavier accessory equipment such as large dump bodies, high pressure hydraulic pumps, etc. Operates about 41% faster than a single gear P.T.O. Comes complete with wire control and mounting parts. Optional features lever shift, air shift, vac-u-matic shift, hydraulic shift, Holley governor drive, and pump flanges to fit most popular hydraulic pumps.

STANDARD OUTPUT SHAFT SIZE 1 1/4"
TORQUE RATING:

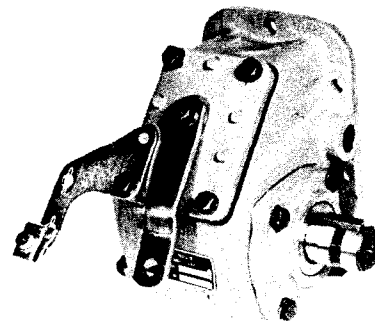
41C — 140 LBS. FT. FOR INTERMITTENT SERVICE.
41D — 125 LBS. FT. FOR INTERMITTENT SERVICE.

Horsepower rating for
intermittent service at—
500 RPM of output shaft
1000 RPM of output shaft

Horsepower

11.9
23.5

41C-41D SERIES (MEDIUM SPEED-TWO GEAR)



6 Bolt

NOTE: No Direct Pump Mount Appl. for 41C Ratio.

FOR HEAVY DUTY OPERATION SHIFTABLE INPUT GEAR

Designed to operate accessory equipment requiring high speed operation or for use on slow transmissions to obtain normal ratios. Operates about 72% faster than a single gear P.T.O. Features a wire control shift as standard. Options include lever shift, air shift, vac-u-matic shift, hydraulic shift, Holley governor drive, and pump flanges to fit most popular pumps.

STANDARD OUTPUT SHAFT SIZE 1 1/4"
TORQUE RATING:

41K — 110 LBS. FT. FOR INTERMITTENT SERVICE.
41X — 85 LBS. FT. FOR INTERMITTENT SERVICE.

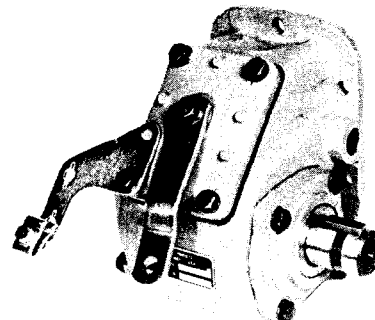
Horsepower rating for
intermittent service at—
500 RPM of output shaft
1000 RPM of output shaft

Horsepower

10
20

5

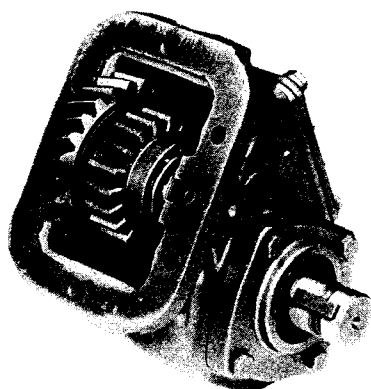
41K-41X SERIES (HIGH SPEED-TWO GEAR)



6 Bolt

CHELSEA POWER TAKE-OFFS

42 KIT 42 SERIES (LOW SPEED-TWO GEAR)



6 Bolt

FOR EXTRA HEAVY DUTY OPERATION CONSTANT MESH INPUT GEAR

This unit was designed specifically for the operation of blowers and other equipment requiring high torque. It features tapered roller bearings on the output shaft and input gear, plus extra wide gears. The input gear in this series is interchangeable. Standard model is shipped with wire control shifter. Options include lever control shift, air shift, vac-u-matic shift, hydraulic shift, Holley governor drive, and pump flanges to fit most popular pumps.

STANDARD OUTPUT SHAFT SIZE 1 1/4"

TORQUE RATING:

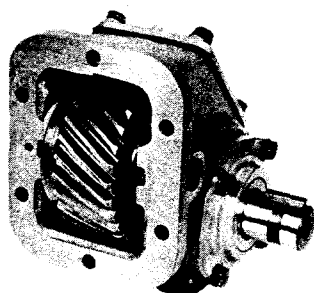
200 LBS. FT. FOR INTERMITTENT SERVICE.

Horsepower

Horsepower rating for
intermittent service at—
500 RPM of output shaft
1000 RPM of output shaft

19
38

43 KIT 43 SERIES (MEDIUM AND HIGH SPEED-TWO GEAR)



6 Bolt

FOR EXTRA HEAVY DUTY OPERATION CONSTANT MESH INPUT GEAR

This heavy duty series was developed for garbage packers, blowers and other equipment requiring operation for long periods of time. Only available in wire control shifter. Optional features are Holley governor drive, and pump flanges to fit most popular pumps.

STANDARD OUTPUT SHAFT SIZE 1 1/4"

TORQUE RATINGS:

43D — MEDIUM SPEED,

180 LBS. FT. FOR INTERMITTENT SERVICE.

43K — HIGH SPEED,

160 LBS. FT. FOR INTERMITTENT SERVICE.

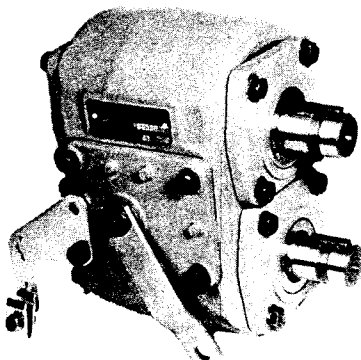
D

K

Horsepower rating for
intermittent service at—
500 RPM of output shaft
1000 RPM of output shaft

17 15
32 30

S45-S47, KIT 45 SERIES (DUAL SHAFT-SINGLE SPEED)



6 Bolt

FOR HEAVY DUTY OPERATION CONSTANT MESH INPUT GEAR

Designed for tank truck applications and other applications requiring two single rotation shafts. Can be ordered in either single or dual shift. Single shift only one shaft can be engaged at a time, dual shift both shafts can be operated simultaneous or independent operation of both shafts. Just two assemblies and 16 input gears fit 95% of all truck transmissions.

STANDARD OUTPUT SHAFT SIZE 1 1/4" BOTH SHAFTS

TORQUE RATING:

140 LBS. FT. FOR INTERMITTENT SERVICE.

Horsepower

Horsepower rating for
intermittent service at—
500 RPM of output shaft
1000 RPM of output shaft

13.2
26.5

CHELSEA POWER TAKE-OFFS

FOR HEAVY DUTY OPERATION CONSTANT MESH INPUT GEAR

Designed for multiple speed reverse application such as heavy winches, transit mixers, etc. Dual shifting controls permits continuous operation in either high or low range and yet still be able to reverse rotation or shift to neutral. Reduces winch inventory, because 2 and 2 rotations eliminates winch rotation problems. Unit comes standard with wire control shifter, lever control shifter is optional.

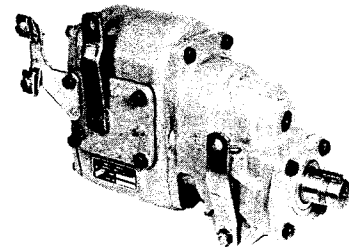
STANDARD OUTPUT SHAFT SIZE 1 1/4"
TORQUE RATING:
140 LBS. FT. FOR INTERMITTENT SERVICE.

Horsepower rating for
intermittent service at—
500 RPM of output shaft
1000 RPM of output shaft

Horsepower

13.2
26.5

S55-57 KIT 55-57 SERIES (TWO SPEEDS FORWARD AND TWO REVERSE)



6 Bolt

FOR MAXIMUM DUTY OPERATION SHIFTABLE INPUT GEAR

This economical and compact unit was designed for maximum duty applications on transmissions with 8-bolt openings, such as Allison, Fuller and Spicer. This unit also fits on Chelsea 4700A series split shaft box giving auxiliary drive. Optional Holley governor drive is available.

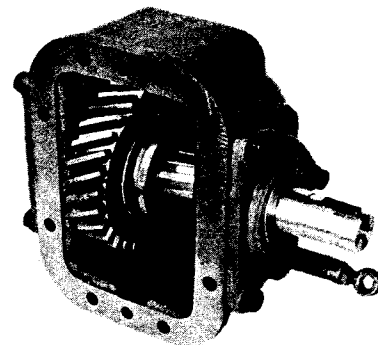
STANDARD OUTPUT SHAFT SIZE 1 1/4"
TORQUE RATING:
400 LBS. FT. FOR INTERMITTENT SERVICE.

Horsepower rating for
intermittent service at—
500 RPM of output shaft
1000 RPM of output shaft

Horsepower

38
76

81 SERIES (8 BOLT—SINGLE SPEED—ONE GEAR)



8 Bolt

FOR HEAVY DUTY OPERATION CONSTANT MESH INPUT GEAR

Designed for operating spreaders or other equipment requiring a high and low single rotation input speed. Standard model comes with wire control shifter, lever control is optional.

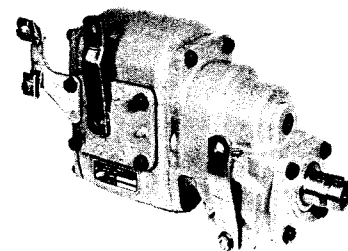
STANDARD OUTPUT SHAFT SIZE 1 1/4"
TORQUE RATING:
140 LBS. FT. FOR INTERMITTENT SERVICE.

Horsepower rating for
intermittent service at—
500 RPM of output shaft
1000 RPM of output shaft

Horsepower

13.2
26.5

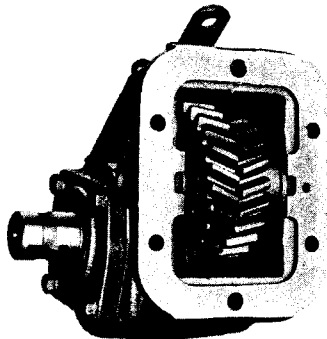
S95-97 KIT 95-97 SERIES (TWO SPEEDS FORWARD)



6 Bolt

CHELSEA POWER TAKE-OFFS

S380-S400 AND KIT 380 SERIES (SINGLE SPEED-TWO GEAR)



6 Bolt

FOR HEAVY DUTY OPERATION CONSTANT MESH INPUT GEAR

Designed for heavy duty applications with inventory economy in mind available in kit form as kit 380. With just four different assemblies and 16 input gears you can fill 95% of all truck transmissions. Wire control shift is standard. Options include lever shift, air shift, vac-u-matic shift, hydraulic shift, Holley governor drive, and pump flanges to fit most popular hydraulic pumps.

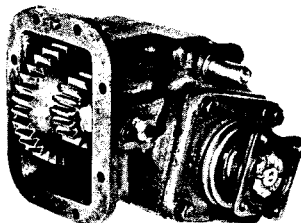
STANDARD OUTPUT SHAFT SIZE 1 1/4"

TORQUE RATING:

140 LBS. FT. FOR INTERMITTENT SERVICE.

Horsepower rating for intermittent service at—	Horsepower
500 RPM of output shaft	13.2
1000 RPM of output shaft	26.5

820 SERIES (SINGLE SPEED-TWO GEAR)



8 Bolt

FOR MAXIMUM DUTY OPERATION CONSTANT MESH INPUT GEAR

This unit was designed for high torque applications and has many options. Standard models is supplied with lever control shift, options include air shift, vac-u-matic, pressure lubrication, Holley governor drive, and pump mounts to fit many popular pumps. This unit also fits on 4700A series split shaft box.

STANDARD OUTPUT SHAFT SIZE 1 1/2"

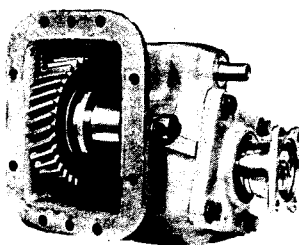
**10 SPLINE SUPPLIED COMPLETE WITH
SPICER 1410 SERIES COMPANION FLANGE.**

TORQUE RATING:

500 LBS. FT. FOR INTERMITTENT SERVICE.

Horsepower rating for intermittent service at—	Horsepower
500 RPM of output shaft	47
1000 RPM of output shaft	94

830 SERIES (HIGH SPEED-TWO GEAR)



8 Bolt

FOR MAXIMUM DUTY OPERATION SHIFTABLE INPUT GEAR

This unit designed for high speed high torque applications. Standard model has lever control shift. Options include air shift, vac-u-matic shift, Holley governor drive, pressure lubrication, and pump mounts for most popular pumps.

STANDARD OUTPUT SHAFT SIZE 1 1/2"

**10 SPLINE SUPPLIED COMPLETE WITH
SPICER 1410 SERIES COMPANION FLANGE.**

TORQUE RATING:

300 LBS. FT. FOR INTERMITTENT SERVICE.

Horsepower rating for intermittent service at—	Horsepower
500 RPM of output shaft	28.5
1000 RPM of output shaft	57

CHELSEA POWER TAKE-OFFS

FOR MAXIMUM DUTY OPERATION CONSTANT MESH P.T.O.

This series is the same as the 820 series with the exception that it has no shifter and therefor runs continually. This series is primarily used on applications requiring continuous hydraulic power. Pressure lubrication is optional but recommended. Holley governor drive is also available.

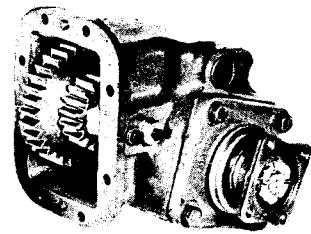
STANDARD OUTPUT SHAFT SIZE 1 1/2"
10 SPLINE SUPPLIED COMPLETE WITH
SPICER 1410 SERIES COMPANION FLANGE.
TORQUE RATING:
500 LBS. FT. FOR INTERMITTENT SERVICE.

Horsepower

Horsepower rating for
intermittent service at—

500 RPM of output shaft	47
1000 RPM of output shaft	94

840 SERIES (CONSTANT MESH—TWO GEAR)



8 Bolt

FOR MAXIMUM DUTY OPERATION CONSTANT MESH INPUT GEAR

This series was designed for use on Allison and Twin Disc automatic transmissions to enable engagement or disengagement of the P.T.O. with engine operating without gear clashing. It is supplied with a three way valve and fittings for shifting unit. Options include pressure lubrication, Holley governor drive, and pump flanges to fit most popular pumps.

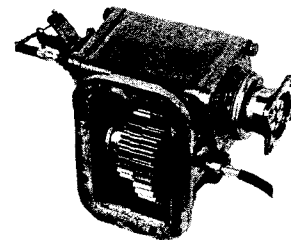
STANDARD OUTPUT SHAFT SIZE 1 1/2"
10 SPLINE SUPPLIED COMPLETE WITH
SPICER 1410 SERIES COMPANION FLANGE.
TORQUE RATING:
500 LBS. FT. FOR INTERMITTENT SERVICE.

Horsepower

Horsepower rating for
intermittent service at—

500 RPM of output shaft	47
1000 RPM of output shaft	94

850 SERIES (POWER SHIFT—TWO GEAR)



8 Bolt

FOR MAXIMUM DUTY OPERATION CONSTANT MESH INPUT GEAR

Designed to fit numerous 8-bolt transmissions and the 4700A series split shaft box. Provides full engine torque forward and reverse for maximum duty reversible applications such as large capacity winches. Supplied with manual shift.

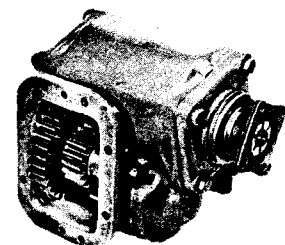
STANDARD OUTPUT SHAFT SIZE 1 1/2"
10 SPLINE SUPPLIED COMPLETE WITH
SPICER 1410 SERIES COMPANION FLANGE.
TORQUE RATING:
500 LBS. FT. FOR INTERMITTENT SERVICE.

Horsepower

Horsepower rating for
intermittent service at—

500 RPM of output shaft	47
1000 RPM of output shaft	94

860 SERIES (ONE FORWARD AND REVERSE)

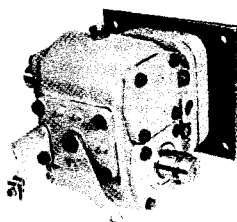


8 Bolt

CHELSEA GEARBOXES

MODEL 2536 (REVERSIBLE GEAR BOX)

Gear Box



FOR HEAVY DUTY OPERATION

Output shaft turns 90% of input in the same rotation as input and 116% in the opposite rotation of input. Wire control is standard, lever control is optional.

STANDARD INPUT SHAFT SIZE 1 1/4"
STANDARD OUTPUT SHAFT SIZE 1 1/4"

TORQUE RATING:
140 LBS. FT. FOR INTERMITTENT SERVICE.

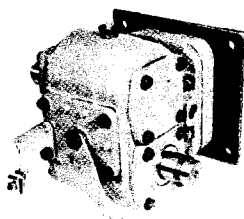
Horsepower

Horsepower rating for
intermittent service at—
500 RPM of output shaft
1000 RPM of output shaft

13.2
26.5

MODEL 2538 (CHANGE ROTATIONAL GEAR BOX)

Gear Box



FOR HEAVY DUTY OPERATION

Output shaft turns 100% of input in the opposite rotation of input. Wire control is standard, lever control is optional.

STANDARD INPUT SHAFT SIZE 1 1/4"
STANDARD OUTPUT SHAFT SIZE 1 1/4"

TORQUE RATING:
140 LBS. FT. FOR INTERMITTENT SERVICE.

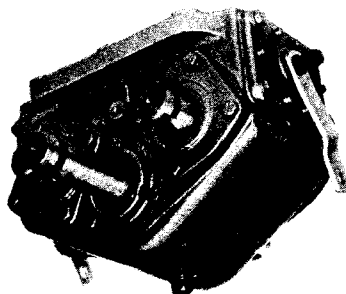
Horsepower

Horsepower rating for
intermittent service at—
500 RPM of output shaft
1000 RPM of output shaft

13.2
26.5

MODEL 2615 (REVERSIBLE POWER DIVIDER)

Gear Box



FOR HEAVY DUTY OPERATION

The two reversible output shafts turn 83% of input in the same rotation as the input and 116% of input in the opposite rotation of the input. The input shaft extends thru the unit for an additional source of power. Designed for wire control shifting.

STANDARD INPUT SHAFT SIZE 1 1/4"
STANDARD OUTPUT SHAFT SIZE 1 1/4"

TORQUE RATING:
140 LBS. FT. FOR INTERMITTENT SERVICE.

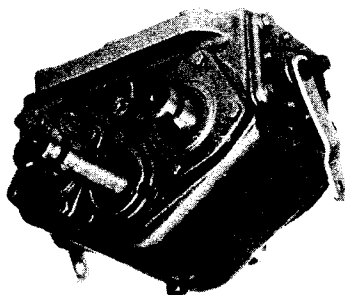
Horsepower

Horsepower rating for
intermittent service at—
500 RPM of output shaft
1000 RPM of output shaft

13.2
26.5

MODEL 2616 (SINGLE SPEED POWER DIVIDER)

Gear Box



FOR HEAVY DUTY OPERATION

The two output shafts turn 141% of input in the opposite rotation of the input. The input shaft extends thru the unit for an additional source of power. Designed for wire control shifting. See specifications on Model 2615 for shaft sizes.

TORQUE RATING:
125 LBS. FT. FOR INTERMITTENT SERVICE.

Horsepower

Horsepower rating for
intermittent service at—
500 RPM of output shaft
1000 RPM of output shaft

11.9
23.5

CHELSEA GEARBOXES

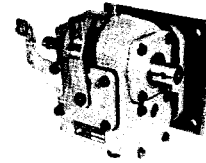
FOR HEAVY DUTY OPERATION

Output shaft turns 33% and 100% of input in the same rotation as the input shaft. Designed for wire control shifting.

STANDARD INPUT SHAFT SIZE 1"
STANDARD OUTPUT SHAFT SIZE 1 1/8"

TORQUE RATING:
125 LBS. FT. FOR INTERMITTENT SERVICE.

MODEL A2625 (LOW AND DIRECT GEAR BOX)



Gear Box

Horsepower

Horsepower rating for
intermittent service at—

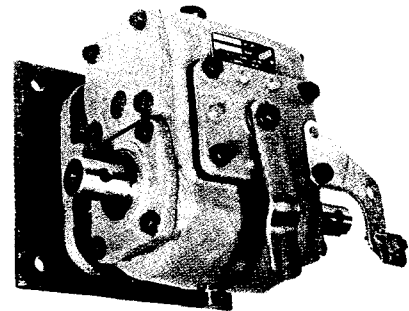
500 RPM of output shaft	11.9
1000 RPM of output shaft	23.5

FOR HEAVY DUTY OPERATION WITH SINGLE SPEED ACCESSORY SHAFT

Two speed output shaft turns 33% and 100% of input in the same rotation as input. The single speed accessory shaft turns 82% of input in the same rotation as input. Unit is supplied with wire control shifter.

STANDARD OUTPUT SHAFT SIZE 1"
TORQUE RATING:
110 LBS. FT. FOR INTERMITTENT SERVICE.
(SINGLE SPEED SHAFT)
125 LBS. FT. FOR INTERMITTENT SERVICE.
(TWO SPEED & INPUT SHAFT)

MODEL A2627 (LOW AND DIRECT GEAR BOX)



Gear Box

Two Speed
Single Speed &
Shaft Input Shaft

Horsepower rating for
intermittent service at—

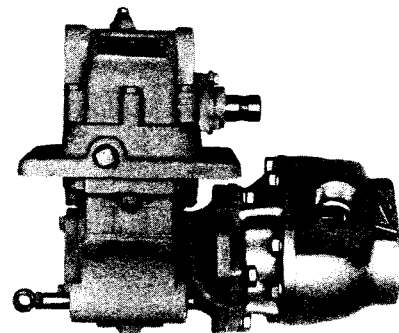
500 RPM of output shaft	10.5 h.p.	11.9 h.p.
1000 RPM of output shaft	20 h.p.	23.5 h.p.

FOR HEAVY DUTY OPERATION

This unit is designed to operate off of the crankshaft for the operation of snowplows, sand spreaders, garbage packers, and other equipment requiring continuous hydraulic power. Lever control shift is standard. Options include wire control shift, air shift, vac-u-matic shift, hydraulic shift, Holley governor drive, and pump flanges to fit most popular pumps.

STANDARD INPUT SHAFT SIZE 1"
STANDARD OUTPUT SHAFT SIZE 1 1/4"
TORQUE RATING:
A2740 — 73% ENGINEWISE ROTATION
140 LBS. FT. FOR INTERMITTENT SERVICE.
A2642 — 53% ENGINEWISE ROTATION
200 LBS. FT. FOR INTERMITTENT SERVICE.

A2740 SERIES (FRONT DRIVE ASSEMBLY)



Gear Box

Horsepower

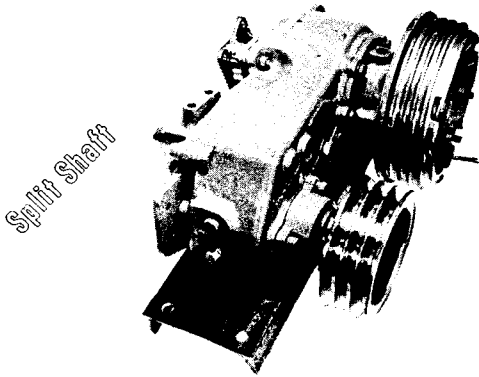
Horsepower rating for
intermittent service at—

500 RPM of output shaft	13.2
1000 RPM of output shaft	26.5

DANA SPLIT SHAFT POWER TAKE-OFF

FOR SMALL TRUCKS OPERATION

4551 SERIES (SPLIT SHAFT POWER TAKE OFF)



This series was designed for vehicles in the 1/2 thru 1 1/2 ton range for operating air compressors, blowers, hammer mills, generators, etc. This compact unit measures 12 1/8" flange to flange and comes complete with an 8 1/2" x 2" brake, Spicer 1350 series companion flanges, and speedometer gearing. It features helical gears for quieter operation, a single shift control, and enginewise rotation. It has a 1.00:1 ratio with all transmission speeds available thru the P.T.O. output shaft.

STANDARD OUTPUT SHAFT SIZE 1 1/4"

MODEL 4551

MAXIMUM INPUT TORQUE 2200 LBS. FT.

P.T.O. TORQUE RATING:

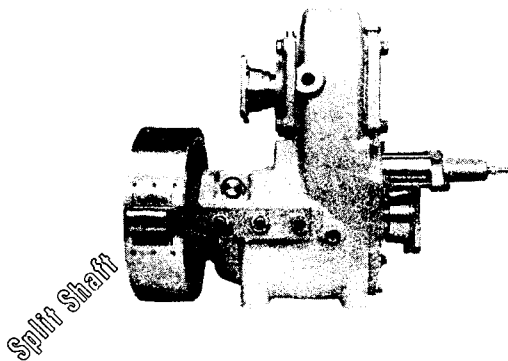
250 LBS. FT. FOR INTERMITTENT SERVICE.

Horsepower

Horsepower rating for
intermittent service at—

500 RPM of output shaft	24
1000 RPM of output shaft	47

4600 SERIES (SPLIT SHAFT POWER TAKE OFF)



This economical unit is used for operating large post hole diggers, large hydraulic pumps, air compressors, blowers, hammer mills, and transfer pumps. It can be mounted in three positions with P.T.O. shaft on right, left, or top, extending to front or rear. This unit has a single shift control, 1.00:1 with all main transmission ratios, including reverse, available thru the P.T.O. output shaft. Standard model has lever shift. Options include, air shift, vac-u-matic, Holley governor drive, pump flanges to fit most popular pumps, and a 9 1/2" x 3 Brake with flange.

4600 WITH BRAKE

4608 WITHOUT BRAKE

4650 W/BRAKE & SPICER 1600 SERIES FLANGE

4651 W/BRAKE & MECHS 7C SERIES FLANGE

TORQUE RATING THRU THE MAIN DRIVE SHAFT:

3000 LBS. FT.

TORQUE RATING P.T.O. OUTPUT SHAFT:

500 LBS. FT. FOR INTERMITTENT SERVICE.

SPECIAL MODELS 4650 & 4651

MAXIMUM INPUT TORQUE RATING: 4300 LBS. FT.

DANA SPLIT SHAFT POWER TAKE-OFF

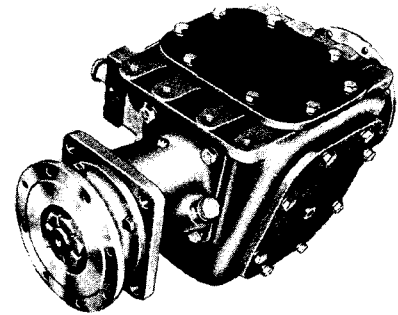
These versatile units can operate up to 3 pieces of equipment simultaneously or separately, either single speed or reversible. The 81, 820, 850, and 860 series 8-bolt P.T.O.'s can all be mounted to this split shaft box. Parking brakes, speedometer gears, flanges, air shift, and vac-u-matic shift are optional with this unit. All transmission speeds are available thru these P.T.O.'s plus a wide selection of ratios in the 8-bolt P.T.O.'s as follows:

P.T.O. Model	Spacer	Rot.	% of Eng.
81AM-30-D	8-A-295	Opp.	108
820KM-30-A		Eng.	123
820JM-30-A		Eng.	104
820FM-30-A		Eng.	88
820EM-30-A		Eng.	81
820CM-30-A		Eng.	69
820AM-30-A		Eng.	51
860CM-50-A (Fwd)		Eng.	69
(Rev.)		Opp.	85
A22ML-C3-G		Eng.	84
830THC-30-A	328422X	Eng.	226
820KHC-30-A		Eng.	123
820JHC-30-A		Eng.	104
820CHC-30-A		Eng.	69
860CHC-50-A (Fwd)		Eng.	69
(Rev.)		Opp.	85

Basic Model	Shaft Size	Maximum Input Torque
4700A	1 31/32" - 10 Spline	4500 lbs. ft.
4700H	2 1/4" - 10 Spline	*
4900	2 1/2" - 10 Spline	*

* Maximum input torque rating on Models 4700H and 4900, contact Power Equipment Division

4700A SPLIT SHAFT BOX (SPUR) 4714A SPLIT SHAFT BOX (HELICAL)



Split Shaft

TYPICAL P.T.O. APPLICATIONS

TYPE OF EQUIPMENT	TYPE OF PTO REQUIRED	TRANSMISSION P.L.V. REQUIREMENTS
AERIAL LADDERS & PLATFORMS	Light or medium duty, single-speed, single gear or 2-gear	Minimum of 400 FPM
AIR COMPRESSORS— Small Capacity up to 85 cu. ft. per minute Large Capacity 85 cu. ft. per minute or larger	2-gear, H.D., single speed 6-bolt Single-speed 8-bolt Split Shaft	Minimum of 500 FPM Trans. with 8-bolt PTO opening Any transmission
BLOWERS Bulk Cement	Extra H.D., single-speed 6-bolt (marginal applications) Suggest 8-bolt, single-speed or Split Shaft	Minimum of 1000 FPM Trans. with 8-bolt PTO opening Any transmission
CONCRETE MIXERS Small Medium and Large	Extra H.D., single-speed 6-bolt Flywheel PTO or 8-bolt single-speed	Minimum of 1000 FPM Trans. with 8-bolt PTO opening
DUMP BODIES—HYDRAULIC Small Capacity up to 8 cu. yds. Medium Capacity 10 yds. Large Capacity 12 to 18 yds. Extra large Capacity 20 yds. or over	Single gear, light or medium duty single gear, H.D. or 2-gear H.D. PTO 2-gear extra H.D. PTO 8-bolt PTO	Minimum of 400 FPM Minimum of 500 FPM Minimum of 500 FPM Trans. with 8-bolt PTO opening
FIRE ENGINES Auxiliary Pump Main Pump	Extra H.D. PTO Split Shaft or 8-bolt PTO	Minimum of 550 FPM Any transmission Trans. with 8-bolt PTO opening
GARBAGE BODIES—HYDRAULIC Small Large	H.D., 2-gear PTO Extra H.D. 2-gear PTO or 8-bolt	Minimum of 550 FPM Trans. with 8-bolt PTO opening
GENERATORS— Small Electrical Power Units Large for Welding	2-gear, H.D. or extra H.D. Split Shaft or 8-bolt PTO	Minimum of 550 FPM Any transmission Trans. with 8-bolt PTO opening

TYPICAL P.T.O. APPLICATIONS

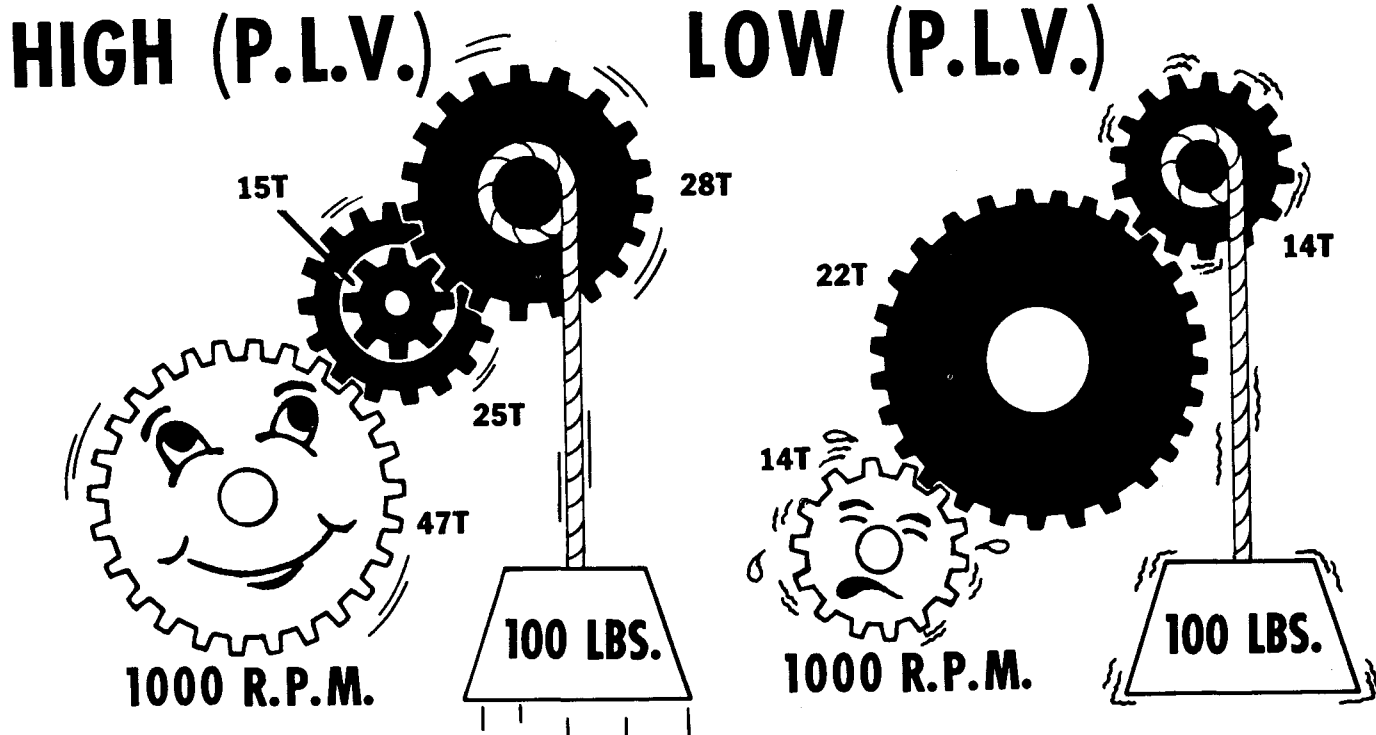
TYPE OF EQUIPMENT	TYPE OF PTO REQUIRED	TRANSMISSION P.L.V. REQUIREMENTS
POST HOLE DIGGERS—HYDRAULIC Small Large	Extra H.D., 2-gear PTO 8-bolt PTO or Split Shaft	Minimum of 600 FPM Trans. with 8-bolt PTO opening Any transmission
POST HOLE DIGGERS—MECHANICAL	H.D. Reversible	Minimum of 500 FPM
PUMPS—HYDRAULIC Capacity based on 1000 RPM, 1000 PSI Up to 15 gals. per min. Up to 25 gals. per min. Up to 35 gals. per min. 36 gals. or higher	Light or medium duty, Single gear PTO 2-gear, H.D. 2-gear, extra H.D. PTO 8-bolt PTO or Split Shaft	Minimum of 400 FPM Minimum of 500 FPM Minimum of 800 FPM Trans. with 8-bolt PTO opening Any transmission
PUMPS—TRANSFER Capacity based on 500 RPM, 50 PSI Gasoline, Oil & Fuel Oil 0 to 150 gals. per min. 150 to 300 gals. per min. 300 up or Aircraft Refuelers Asphalt Pumps	H.D., 2-gear Extra H.D., 2-gear PTO 8-bolt PTO or Split Shaft Extra H.D., 2-gear PTO 8-bolt PTO or Split Shaft	Minimum of 500 FPM Minimum of 800 FPM Trans. with 8-bolt opening Any transmission Minimum of 800 FPM Trans. with 8-bolt opening Any transmission
SNOW PLOWS—	Recommend Front Engine Drive or 2-gear, H.D. single speed	Minimum of 500 FPM
SPREADERS—MECHANICAL Lime Fertilizer	Single-speed H.D. 2-gear PTO with 2-speed gear box	Minimum of 500 FPM
SPREADERS—HYDRAULIC	Front Engine or 2-gear, single-speed H.D. PTO	
TAILGATES—	Single gear, medium duty	Minimum of 400 FPM
WINCHES—MECHANICAL Under 30000 lbs. capacity Over 30000 lbs. capacity	H.D. Reversible PTO 8-bolt Reversible Top Mount or Split Shaft	Minimum of 500 FPM Maximum of 2000 FPM Trans. with 8-bolt PTO opening Auxiliary with top mount opening Any transmission
WRECKERS—See Winches		

GUIDE FOR P.T.O. APPLICATIONS P.L.V.

New types of P.T.O. Applications are now a daily challenge to all of us. Chelsea has provided it's customers with a guide which can assist in making better P.T.O. installations. The basis of this guide is an understanding of Pitch Line Velocity (P.L.V.)

P.L.V. is one of the most important factors in determining the P.T.O. horsepower capacity of any transmission. P.L.V. has no value in determining the quality, Torque rating, or use of any transmission except the capacity to transmit horsepower thru the P.T.O.

P.L.V. is explained below, and on the next two pages we have a general guide to P.T.O. and transmission selections for various P.T.O. applications.



PITCH LINE VELOCITY (P.L.V.) is defined technically in the following formula:

$$\text{P.L.V. in Feet Per Minute (FPM)} = \frac{\text{P.D.} \times 3.1416 \times \text{R.P.M.}}{12}$$

The P.L.V. ratings shown in the application section of our catalog apply to the gear in the transmission which drives the Power Take Off. The gear, then, would be the source of power for the P.T.O., and would thus determine the Output Horsepower Potential of the Power Take Off.

From the formula, we note that the speed of the gear, and also its size (Pitch Diameter) both affect the P.L.V. The ratings shown in the catalog are all based on an engine speed of 1000 RPM. Referring to the above illustration, let us imagine that both 100 lb. loads are being lifted at the same speed, and that Mr. High P.L.V. and Mr. Low P.L.V. are both turning at the same speed.

However, as Mr. High P.L.V. is large, we are able to use a reduction P.T.O. to obtain the required R.P.M., the mechanical advantage of which is readily illustrated. On the other hand, because Mr. Low P.L.V. is small, we have to use the type P.T.O. illustrated to obtain the required R.P.M., with the resulting mechanical disadvantage as illustrated. However, the size of the gear isn't always important, in that a large gear which turns slower than a small gear, could have a lower P.L.V. than the smaller one, as indicated by the above formula.

In other words, both the size of the gear, and equally important, its speed affect P.L.V., which in turn affects the Output Horsepower Potential. Horsepower is defined technically as follows:

$$\text{H.P.} = \frac{\text{Torque} \times \text{RPM}}{5250}$$

From this formula, we see that Torque and RPM both influence Horsepower. Disregarding Torque, we note that the faster the RPM, the greater will be the Horsepower. Therefore, we can conclude that the greater the P.L.V. of the gear which drives the Power Take Off (the PTO's source of Power), the greater will be the Output Horsepower Potential. In the illustration above, the reduction PTO represents our Model 22L, while our Model 41K is represented by the High Speed gear ratio being used by Mr. Low P.L.V.

HORSEPOWER — TORQUE — RPM CONVERSION CHART

TO FIND THE TORQUE. Given: 100 HP at 1750 RPM.
Then: with a straight edge on HP scale at 100 (Left Side)
and on RPM scale at 1750,

Find Answer on T scale = 300 foot pounds torque
(Left Side).

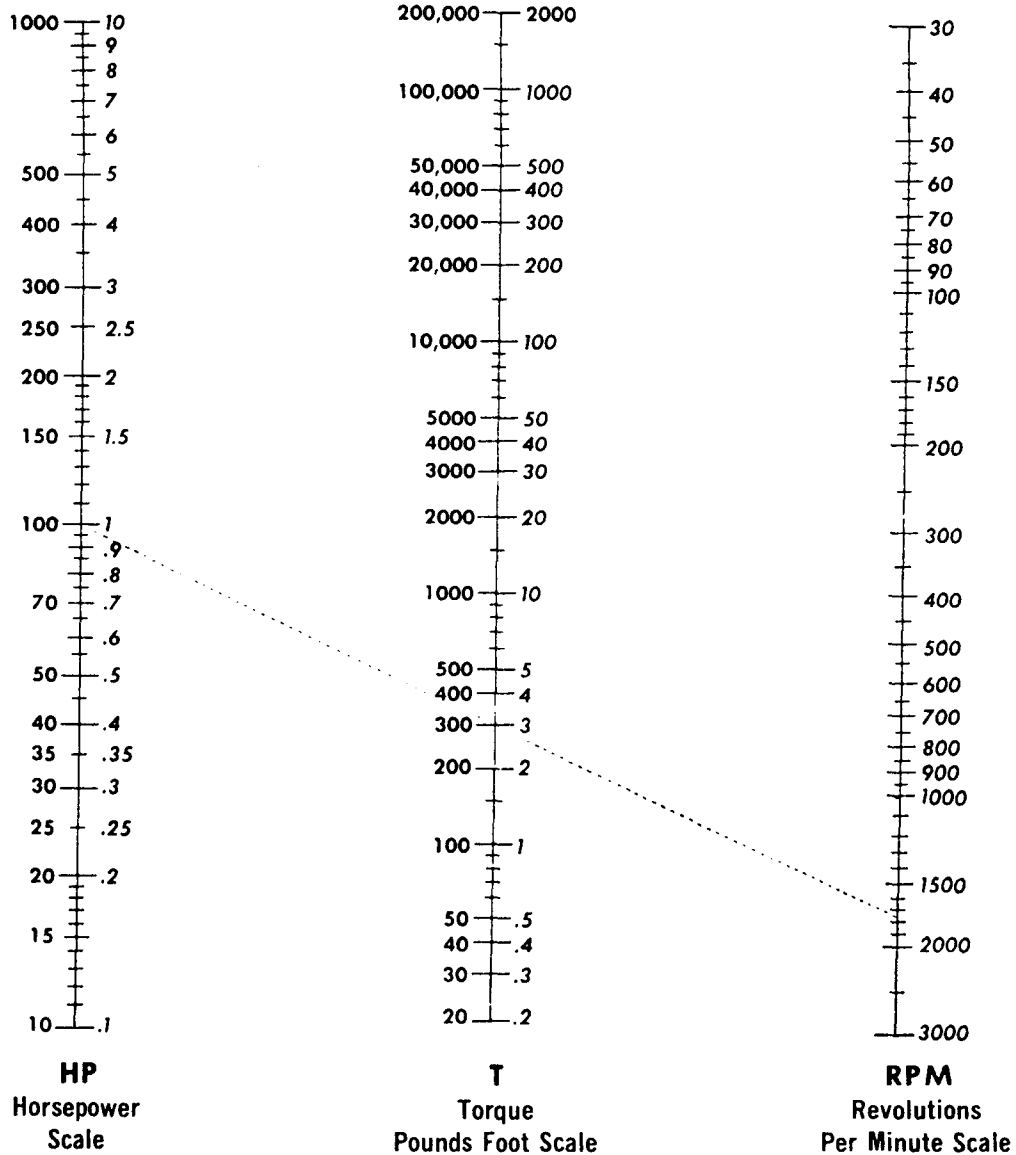
Formula: $\frac{HP \times 5252}{RPM} = T$ Foot Pounds Torque

TO FIND THE HP. Given: 3 foot pounds torque at
1750 RPM.

Then: with a straight edge on the "T" scale at 3 (Right
Side) and on the RPM scale at 1750,

Find Answer on the HP scale = 1 Horsepower (Right Side)

Formula: $\frac{T \times RPM}{5252} = HP$ Horsepower

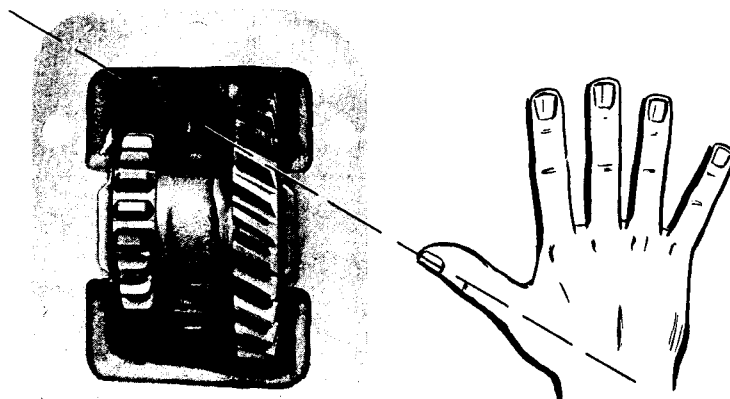


HELICAL GEAR IDENTIFICATION

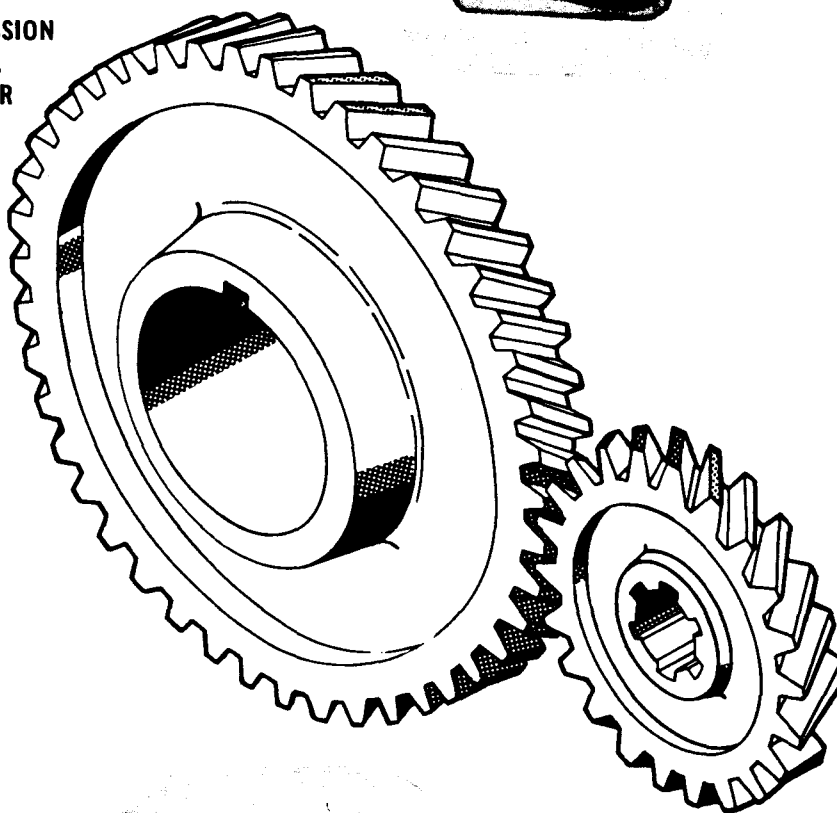
Identification of helical gear teeth may be made by using the "handy rule of thumb" methods illustrated below.

RIGHT HAND HELIX

If the transmission p.t.o. driver gear has a RIGHT hand helix, then the mating p.t.o. input gear MUST have a LEFT hand helix.



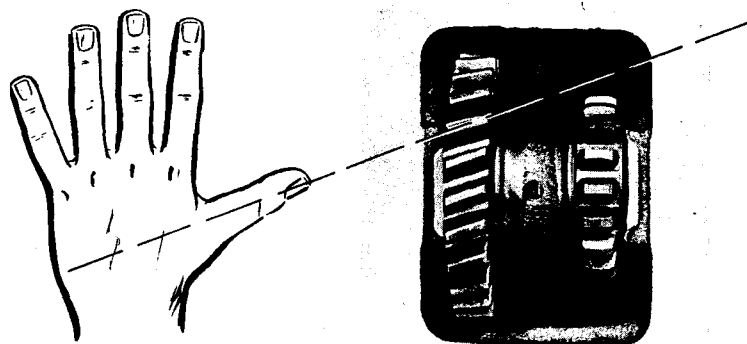
TRANSMISSION
P.T.O.
DRIVER
GEAR



P.T.O.
INPUT
GEAR

LEFT HAND HELIX

If the transmission p.t.o. driver gear has a LEFT hand helix, then the mating p.t.o. input gear MUST have a RIGHT hand helix.



ADAPTER GEAR ASSEMBLIES

New Cantilever

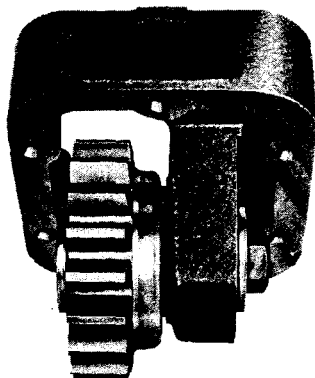


Fig. 1

Solid Body – Single Gear



Fig. 2

Solid Body – Cluster Gear

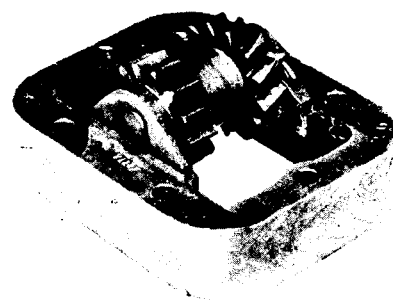


Fig. 3

Flanged Body – Single Gear

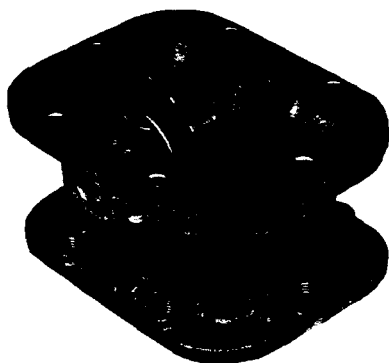


Fig. 4

Flanged Body – Cluster Gear

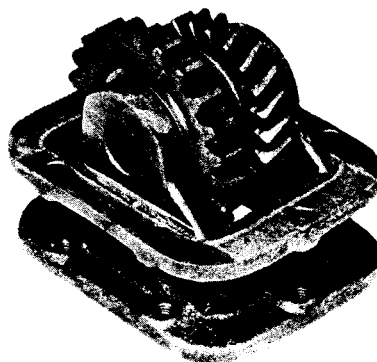


Fig. 5

Vertical Offset

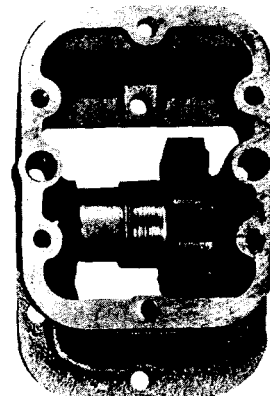


Fig. 6

Angular & Horizontal – Single Gear

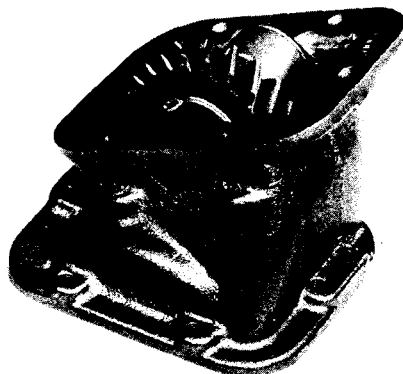


Fig. 7

Angular & Horizontal – Cluster Gear

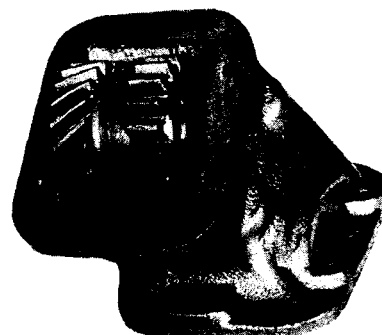


Fig. 8

ADAPTER GEAR ASSEMBLIES Identification

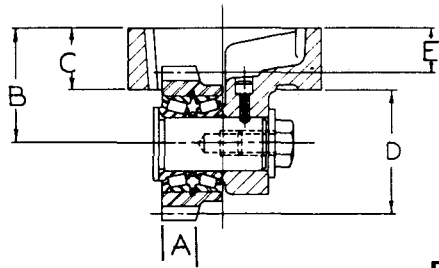


FIGURE 1A

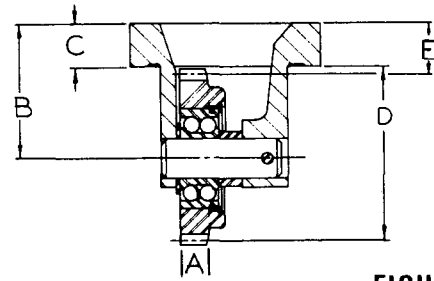


FIGURE 2A

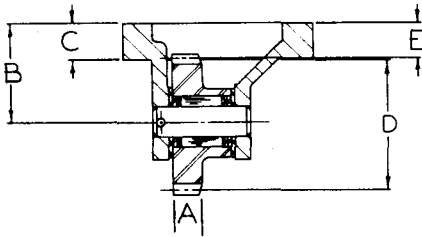


FIGURE 3A

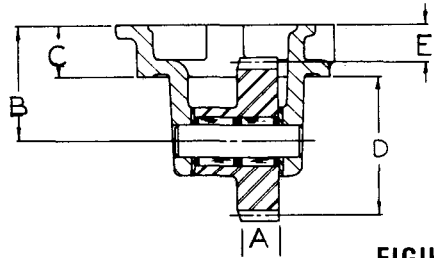


FIGURE 4A

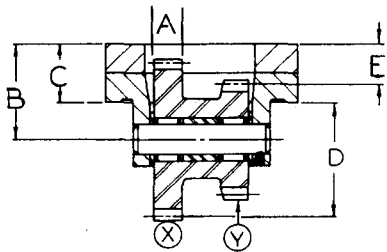


FIGURE 5A

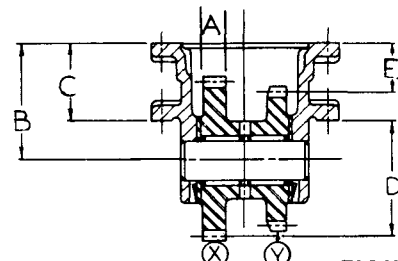


FIGURE 6A

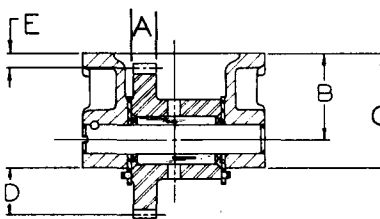


FIGURE 7A

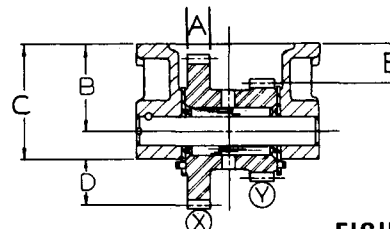


FIGURE 8A

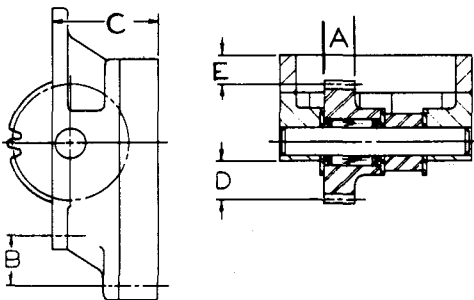


FIGURE 9A

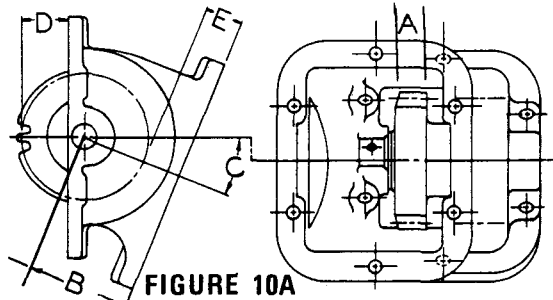


FIGURE 10A

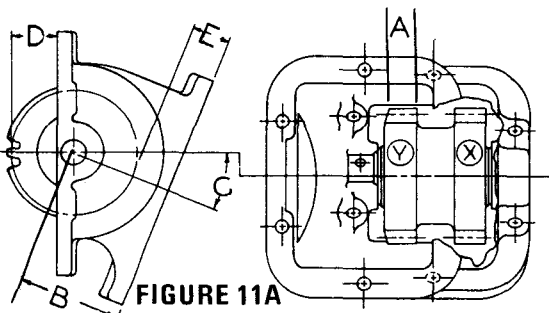


FIGURE 11A

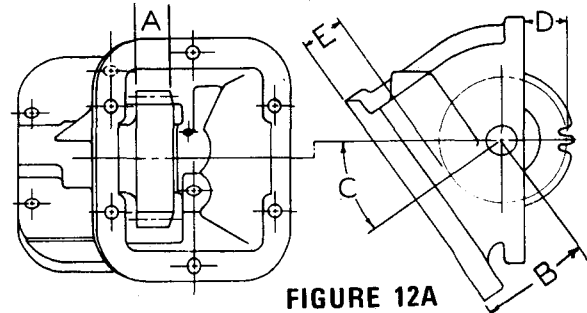


FIGURE 12A

ADAPTER GEAR ASSEMBLIES

Identification

ADAPTER GEAR ASSEMBLY	NUMBER TEETH	Pitch & Pressure Angle	A Face	B – Center Line of Adapter Gear to Outer Face	C – Body Thickness	D – Pitch Line to Inner Face	E – Pitch Line to Outer Face
328530-1X	22T	6 or 6/8-20° Spur	31/32"	2.917"	1.650"	3.100"	1.085"
328530-2X	18T	5 or 5/7-20° Spur	31/32"	2.917"	1.650"	3.105"	1.117"
328530-3X	26T	7.6168-18°29'22" Helical	31/32"	2.917"	1.650"	3.124"	1.060"
See Figure 1 & 1A							
328152X	22T	5 or 5/7-20° Spur	3/4"	3.284"	0.958"	4.524"	1.089"
328544-1X	24T	6/8-20° Spur	3/4"	3.062"	0.906"	4.150"	1.055"
See Figure 2 & 2A							
328563X	18T	6 or 6/8-20° Spur	3/4"	2.589"	0.974"	3.115"	1.105"
See Figure 2 & 3A							
328207X	28T	7.6168-18°29'22" Helical	1"	3.056"	1.366"	3.690"	1.100"
328316X	28T	7.6168-18°29'22" Helical	1"	3.056"	1.366"	3.690"	1.100"
328330X	28T	7.6168-18°29'22" Helical	1"	3.056"	1.366"	3.690"	1.100"
See Figure 2 & 4A							
328000X	15T	5NP-17°30' Helical	3/4"	2.375"	1.452"	2.623"	1.105"
	15T	6 or 6/8-20°	3/4"				
	18T	6.5400NP-18°27'54" Helical	3/4"				
328153X	15T	6 or 6/8-20°	3/4"	2.375"	1.452"	2.438"	1.105"
See Figure 3 & 5A							
310314X	23T	6/8-20°	11/16"	3.005"	2.166"	2.340"	1.085"
	21T	7.6168-18°22'	5/8"				
328547X	21T	6/8-20°	19/32"	3.011"	2.011"	2.916"	1.300"
	23T	6.5199-18°31'5"	19/32"				
See Figure 5 & 6A							
310374X	19T	6 or 6/8-20°	11/16"	2.720"	3.234"	1.063"	1.137"
310640X	23T	8.0829-20°	11/16"	2.716"	3.234"	1.108"	1.089"
328548X	19T	6/7-17 1/2°	1/2"	2.716"	3.234"	1.105"	1.085"
See Figure 4 & 7A							
310373X	22T	6 or 6/8-20°	5/8"	2.264"	2.982"	1.100"	1.098"
	14T						
See Figure 5 & 8A							
328034X	21T	7NP-20°	3/4"	1.312"	3.052"	1.149"	1.149"
328036X	19T	6 or 6/8-20°	3/4"	1.312"	2.982"	1.136"	1.105"
328552X	21T	8.1160-20°	3/4"	1.312"	2.995"	1.110"	1.110"
328553X	19T	6 or 6/8-20°	3/4"	1.312"	2.982"	1.136"	1.105"
328565X	21T	8.1160-20°	3/4"	1.312"	2.995"	1.110"	1.110"
See Figure 6 & 9A							
328047X	22T	8.0829-20°	3/4"	2.667"	22°	1.110"	1.085"
328532X	21T	7.3449-20°	3/4"	2.667"	22°	1.110"	1.085"
328559X	19T	6/8P-20°	1-1/2"	2.667"	22°	1.110"	1.085"
328561X	19T	6 or 6/8-20°	3/4"	2.667"	22°	1.110"	1.085"
328562X	23T	7.6168-18°29'22"	3/4"	2.667"	22°	1.110"	1.085"
See Figure 7 & 10A							
328031X	21T	7NP-20°	—	2.667"	22°	1.110"	1.085"
	19T	6/8-20°	3/4"				
328108X	21T	8.1160-20°	—	2.667"	22°	1.110"	1.085"
	19T	6 or 6/8-20°	13/16"				
328448X	23T	7.6168-NP-18°29'22"	—	2.667"	22°	1.110"	1.085"
	19T	6/8-20°	3/4"				
328554X	19T	6 or 6/8-20°	—	2.667"	22°	1.110"	1.085"
	19T	6 or 6/8-20°	3/4"				
See Figure 8 & 11A							
328068X	23T	7.6168-18°29'22"	1"	2.751"	35°	1.085"	1.085"
328107X	20T	6/8-20°	1"	2.751"	35°	1.085"	1.085"
328147X	22T	8.1160-20°	1"	2.751"	35°	1.085"	1.085"
328206X	23T	8.0829-20°	1"	2.751"	35°	1.085"	1.085"
328555X	22T	7.3449-20°	1"	2.751"	35°	1.085"	1.085"
328556X	20T	6/8-20°	1"	2.751"	35°	1.085"	1.085"
328557X	23T	7.6168-18°29'22"	1"	2.681"	35°	1.085"	1.085"
See Figure 7 & 12A							

ADAPTER GEAR ASSEMBLIES

Identification

ADAPTER GEAR ASSEMBLY	ADAPTER GEAR ASSEMBLIES Consist of all items listed . . .							
	Adapter Gear	Adapter Body	Solid Roller Bearing	Needle Bearing	Bearing Spacer	Idler Shaft	Thrust Washer Two Required	Rivet, Pin or Screw
328530-1X 328530-2X 328530-3X <i>See Figure 1 & 1A</i>	DO NOT DISASSEMBLE PERMANENT ASSEMBLY							
328152X	43-P-64	42-P-65	550775	—	4-P-68	44-P-15	31-P-21	500221-28
328544-1X	43-P-102	42-P-89	550775	—	4-P-105	44-P-22	31-P-21	500221-27
<i>See Figure 2 & 2A</i>								
328563X	43-P-96	42-P-86	—	378545	—	44-P-19	31-P-21	500219-26
<i>Included with 328563X is Gaskets 35-P-9-1 & 35-P-9-2.</i>								
<i>See Figure 2 & 3A</i>								
328207X	43-P-69	42-P-68	—	378384	14-P-26	44-P-16	378330	501088-4
328316X	43-P-69	42-P-70	—	378384	14-P-26	44-P-16	378330	501088-4
328330X	43-P-69	42-P-68	—	378384	14-P-26	44-P-16	378330	501088-4
<i>See Figure 2 & 4A</i>								
328000X	43-P-48	42-P-50	—	378544	14-P-12	44-P-10	31-P-23	500584-5
328153X	43-P-65	42-P-60	—	378544	14-P-12	44-P-10	31-P-23	500584-5
<i>See Figure 3 & 5A</i>								
310314X	43-P-39	42-P-42	550113	—	—	44-P-1	974-W	500219-28
328547X	43-P-104	42-P-88	—	550128	—	44-P-1	974-W	500219-28
<i>See Figure 5 & 6A</i>								
310374X	43-P-41	42-P-53	550110	—	—	9-P-13	330292	500026-11
310640X	43-P-45	42-P-46	550392	—	—	9-P-13	330292	500026-11
328548X	43-P-101	42-P-53	550110	—	—	9-P-13	330292	500026-11
<i>See Figure 4 & 7A</i>								
310373X	43-P-40	42-P-44	550110	—	—	9-P-13	330479	500026-11
<i>See Figure 5 & 8A</i>								
328034X	43-P-52	42-P-56	—	378546	4-P-58	9-P-25	{ 31-P-11 31-P-23	378452-7
328036X	43-P-54	42-P-56	—	378546	4-P-58	9-P-25	{ 31-P-11 31-P-23	378452-7
328552X	43-P-94	42-P-56	—	378544	14-P-12	9-P-25	31-P-11	378452-7
328553X	43-P-54	42-P-56	—	378546	4-P-58	9-P-25	{ 31-P-11 31-P-23	378452-7
328565X	43-P-94	42-P-56	—	378544	14-P-12	9-P-25	31-P-11	378452-7
<i>See Figure 6 & 9A</i>								
328047X	43-P-56	42-P-52	—	378546	4-P-59	44-P-12	{ 31-P-11 31-P-23	378452-7
328532X	43-P-71	42-P-52	—	378546	4-P-59	44-P-12	{ 31-P-11 31-P-23	378452-7
328559X	43-P-106	42-P-52	—	378544	14-P-12	44-P-12	{ 31-P-11 31-P-23	378452-7
328561X	43-P-54	42-P-52	—	378546	4-P-59	44-P-12	{ 31-P-11 31-P-23	378452-7
328562X	43-P-90	42-P-52	—	378546	4-P-59	44-P-12	{ 31-P-11 31-P-23	378452-7
<i>See Figure 7 & 10A</i>								
328031X	43-P-51	42-P-52	—	378544	14-P-12	44-P-12	{ 31-P-11 31-P-23	378452-7
328108X	43-P-62	42-P-61	550439	—	14-P-15	9-P-27	—	378452-7
328448X	43-P-76	42-P-61	550439	—	14-P-15	9-P-27	—	378452-7

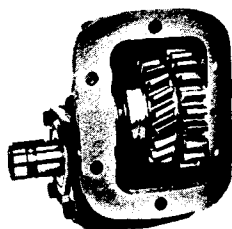
For Additional Information Refer to Parts List CHP-460-13.

ASSEMBLY ARRANGEMENTS

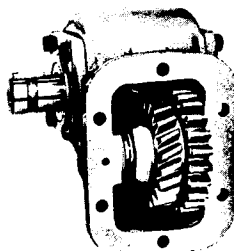
A22L, S380-S400, 41, 42 & 43 SERIES

HEAVY DUTY - SINGLE SPEED

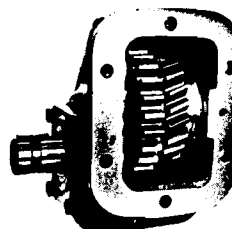
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OF
TRANSMISSION



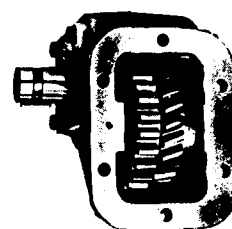
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C3

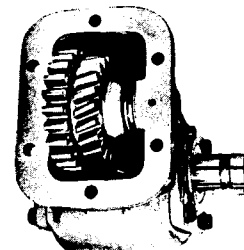


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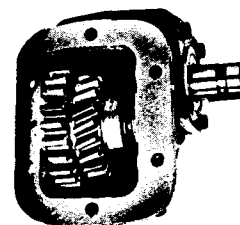


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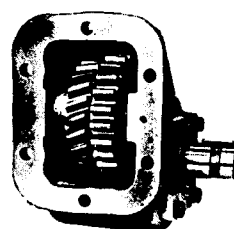
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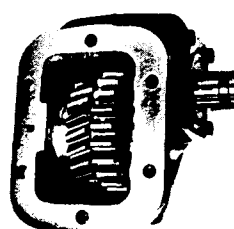
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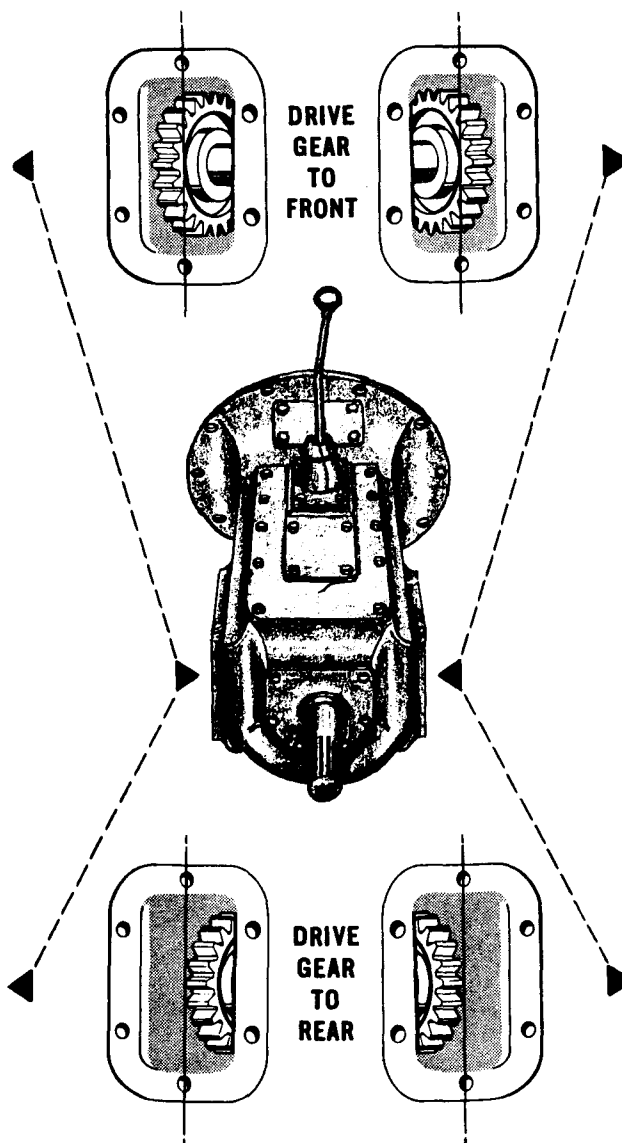
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C4



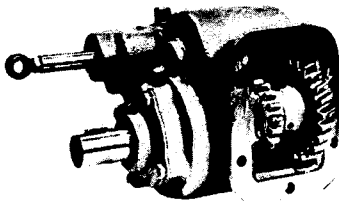
C6



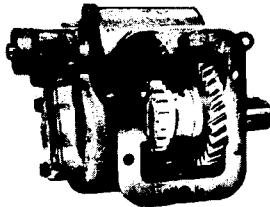
ASSEMBLY ARRANGEMENTS

30, 32 SERIES - HELICAL TWO FORWARD AND ONE REVERSE
Model 30 will have output shaft to rear, with both shifter
& shaft above center line.

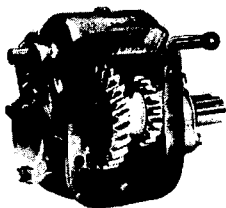
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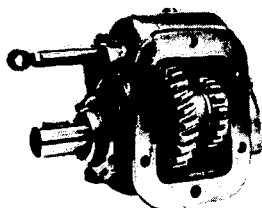
B1



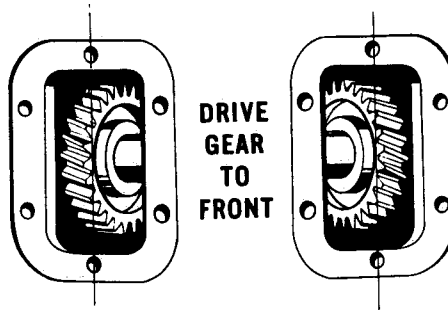
B2



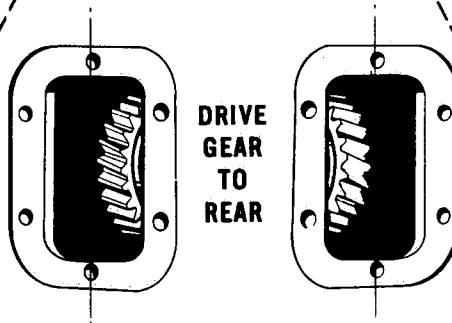
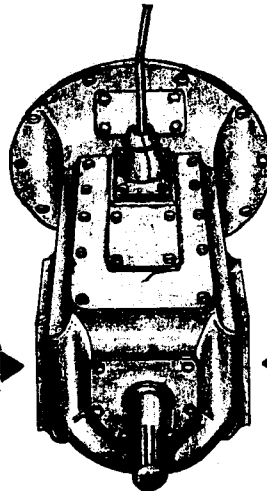
A1



A2

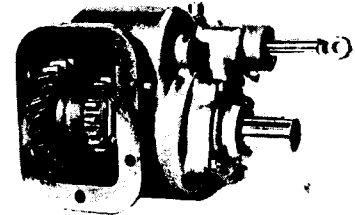


DRIVE
GEAR
TO
FRONT

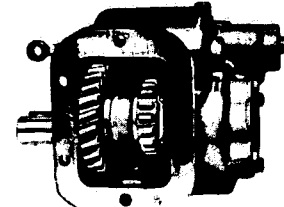


DRIVE
GEAR
TO
REAR

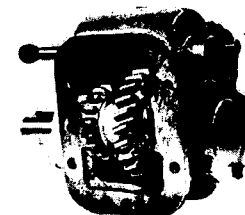
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OF
TRANSMISSION



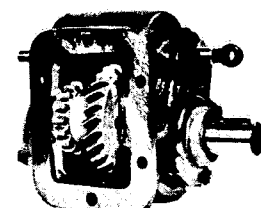
A1



A2



B1

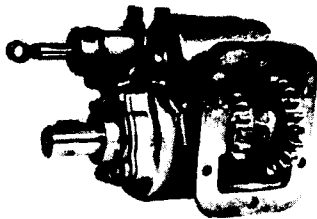


B2

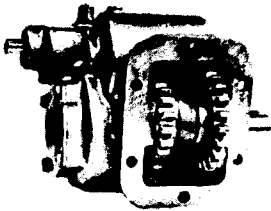
ASSEMBLY ARRANGEMENTS

S32, 34L SERIES

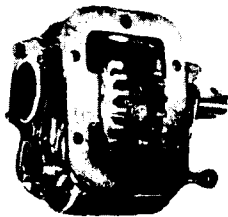
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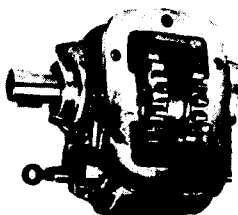
B1



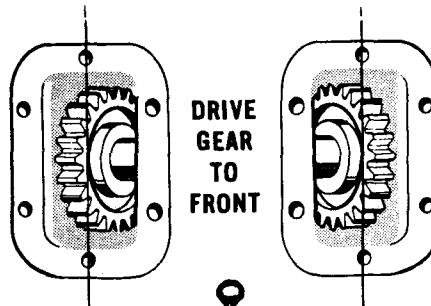
B2



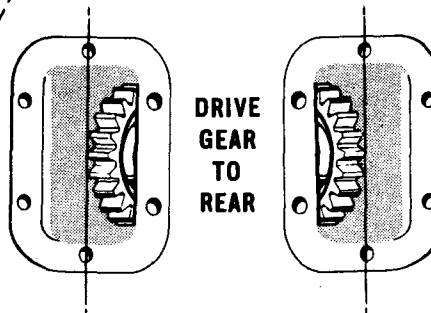
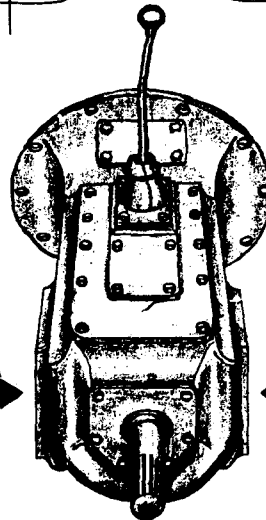
B1



B2

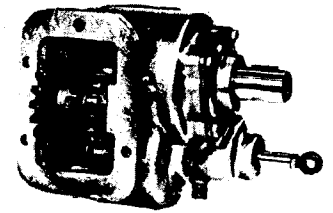


DRIVE
GEAR
TO
FRONT

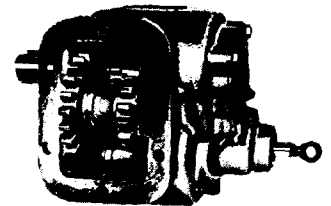


DRIVE
GEAR
TO
REAR

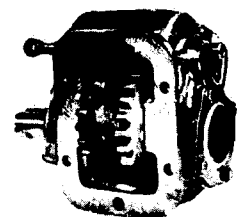
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OF
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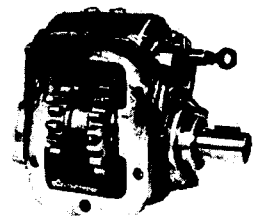
B1



B2



B1



B2

ASSEMBLY ARRANGEMENTS

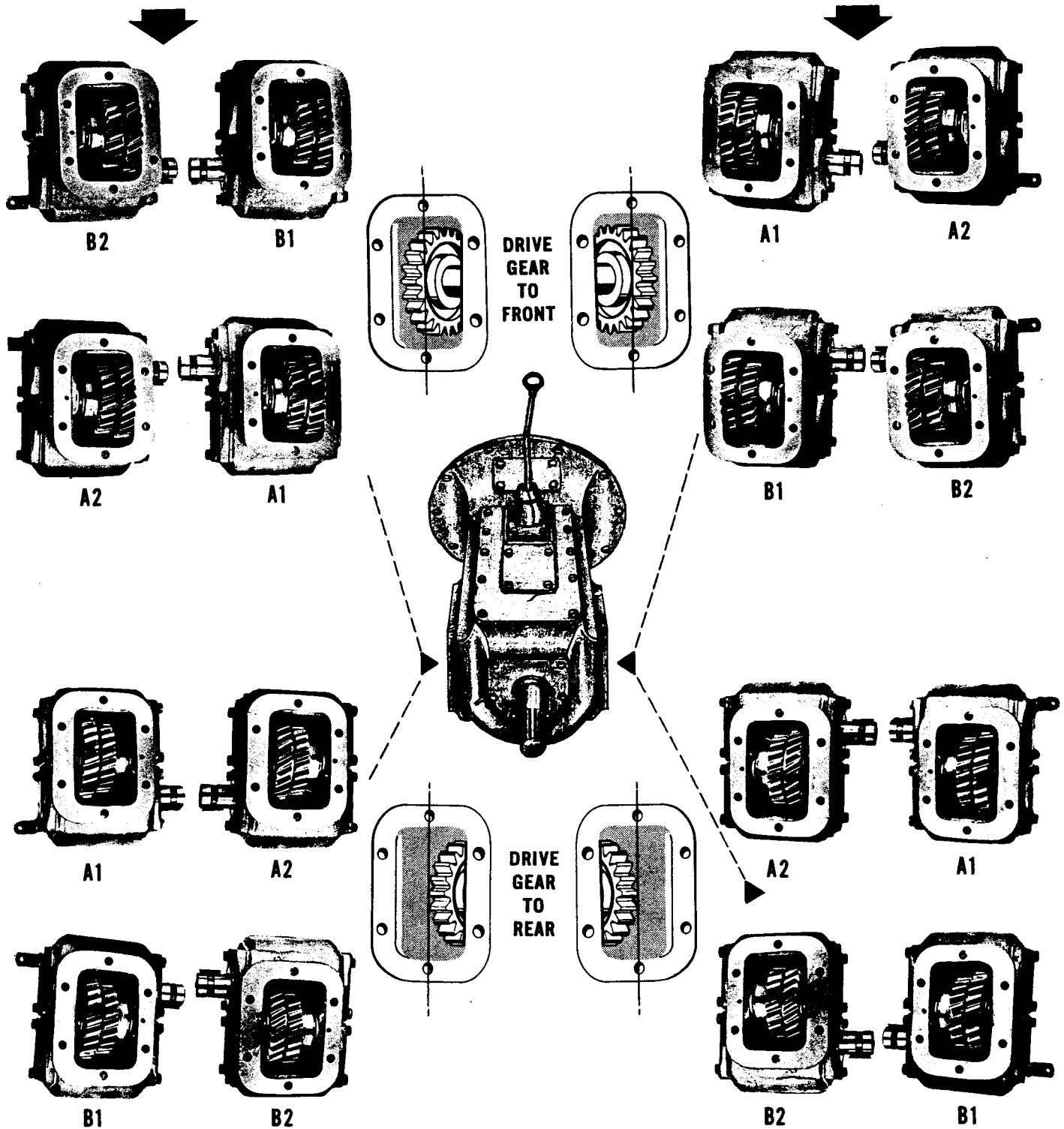
S35-37 SERIES - REVERSIBLE

S55-57 SERIES - TWO FORWARD AND TWO REVERSE

S97-97 SERIES - TWO FORWARD

LEFT SIDE
OF
TRANSMISSION

RIGHT SIDE
OF
TRANSMISSION



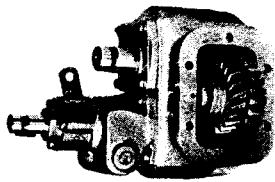
ASSEMBLY ARRANGEMENTS

LEFT SIDE
OF
TRANSMISSION

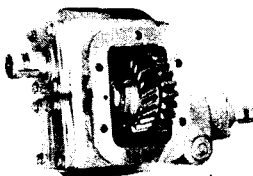


SR35-37 REVERSIBLE DUAL WITH SINGLE SPEED
EXTENSION SERIES

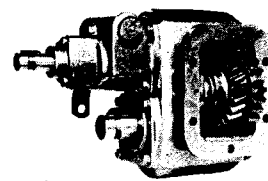
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OF
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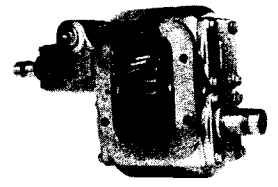
A1



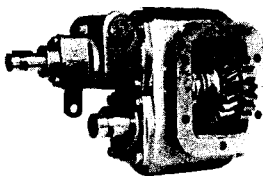
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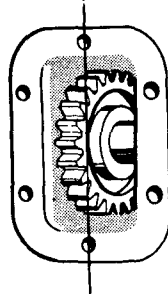
B1



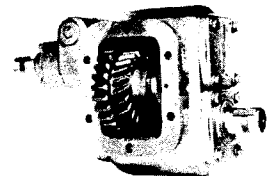
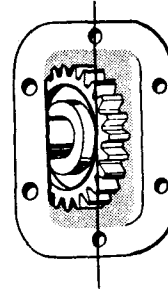
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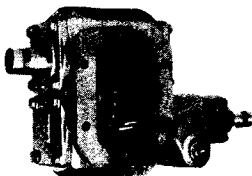
B1



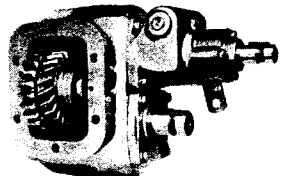
DRIVE
GEAR
TO
FRONT



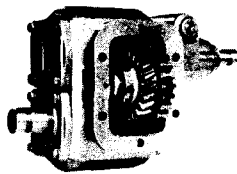
A3



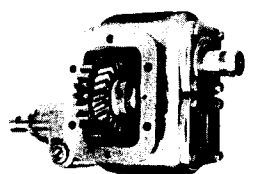
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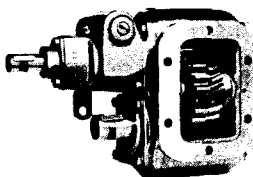
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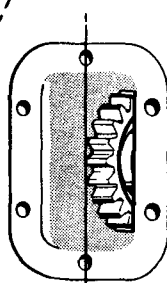
B3



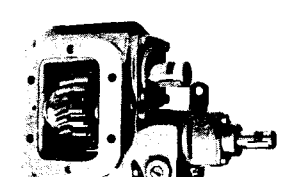
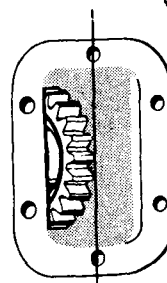
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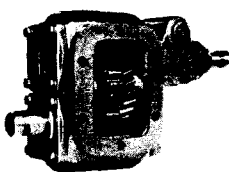
A2



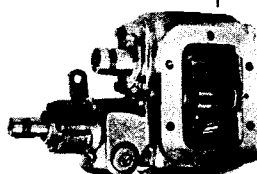
DRIVE
GEAR
TO
REAR



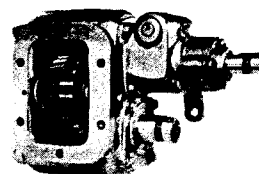
A2



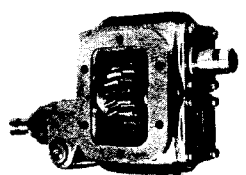
A4



B2



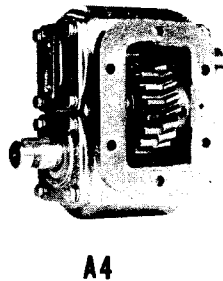
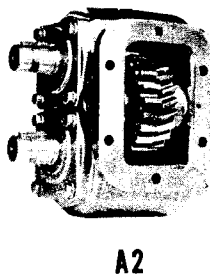
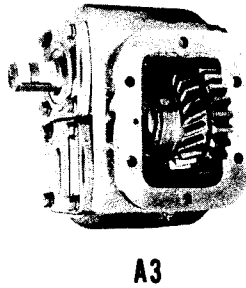
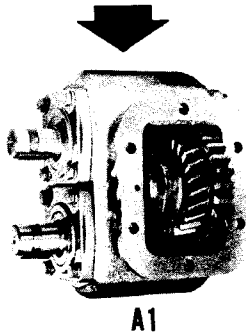
B2



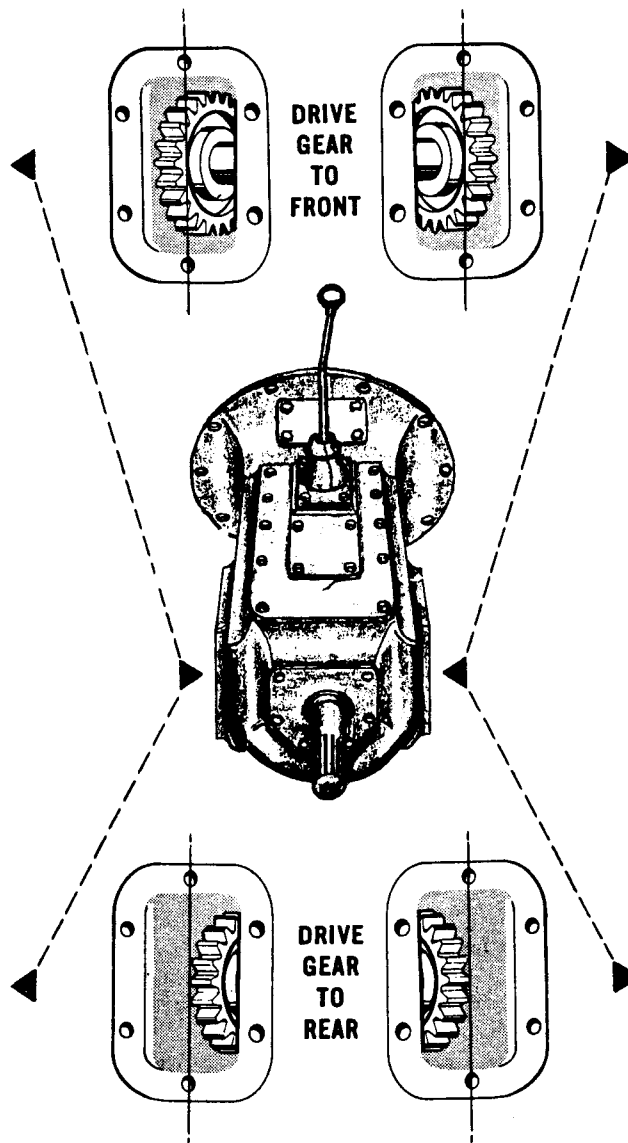
A4

ASSEMBLY ARRANGEMENTS

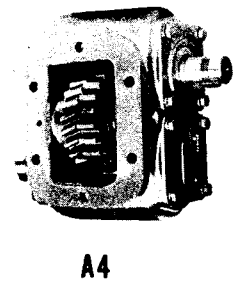
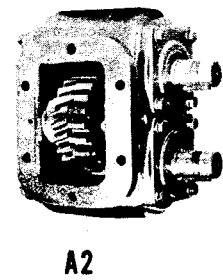
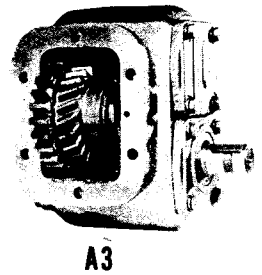
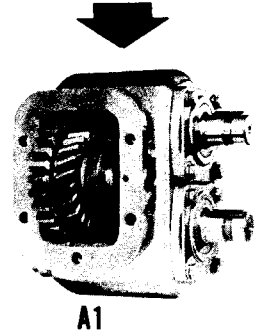
LEFT SIDE
OF
TRANSMISSION



S45-47 SINGLE SPEED DUAL SERIES



RIGHT SIDE
OF
TRANSMISSION



ILLUSTRATIONS

TYPICAL P.T.O. INSTALLATIONS

INSTALLATION INSTRUCTIONS

Thread COARSE END of STUDS or CAP SCREWS into Transmission Aperture Pad "B."

Distribute Gaskets "C" between all MOUNTING PARTS as called for in the Application Tables. One or more Gaskets may be required on either or both sides of FILLER BLOCKS, ADAPTER GEAR ASSEMBLIES or ADAPTER PLATES.

Be sure Gears mesh properly and run freely. Backlash should be between .008" & .012".

Assemble POWER TAKE-OFF with LOCKWASHERS and STUD NUTS. Be sure to tighten nuts evenly.

AFTER ASSEMBLY in order to provide the best running condition, If the installation appears to be,
LOOSE

and the
Power Take-Off
RATTLES

REMOVE ONE OR MORE GASKETS.

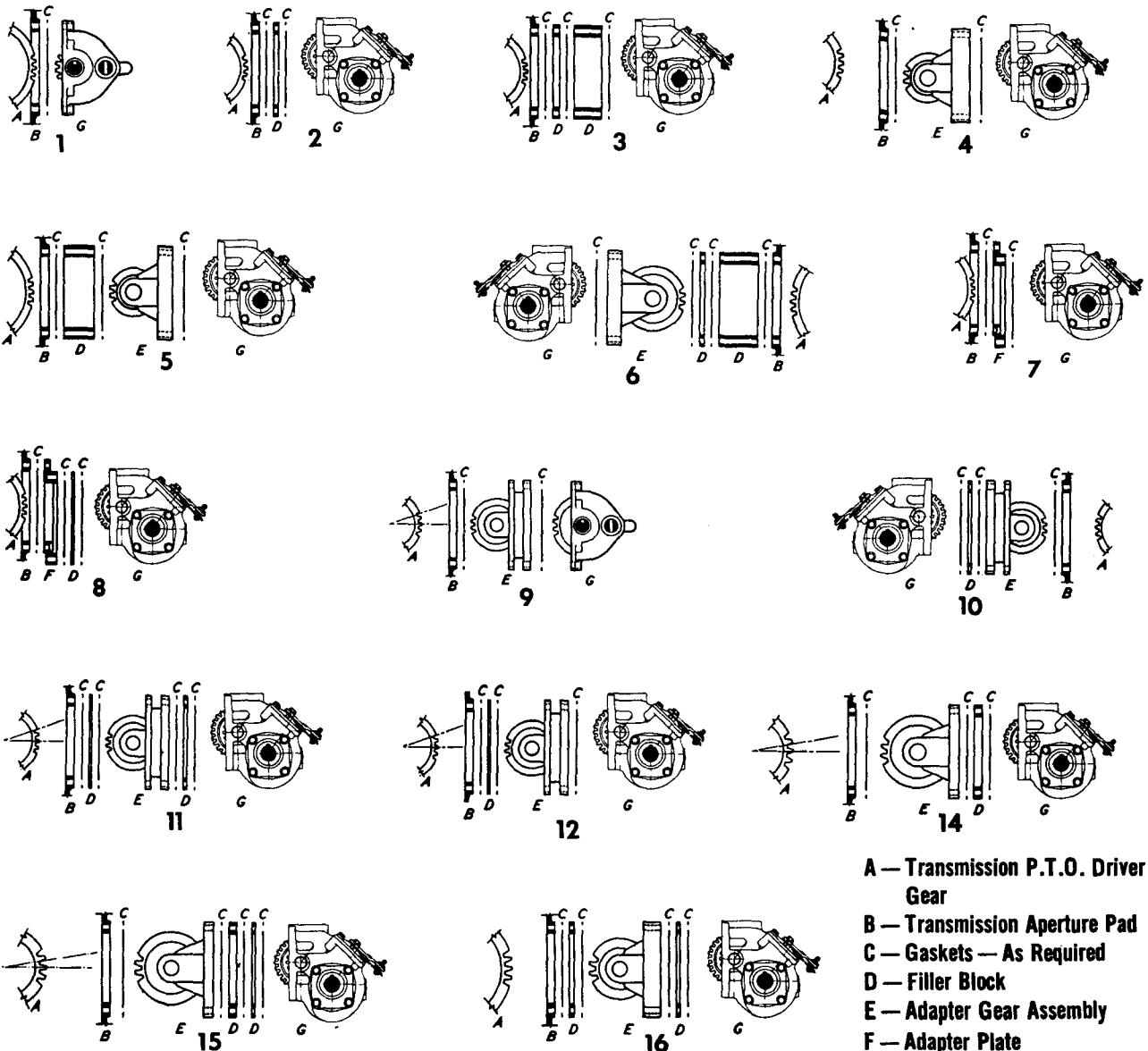
If the installation appears to be,
TIGHT

and the
Power Take-Off
WHINES

ADD ONE OR MORE GASKETS.

THE ILLUSTRATION NUMBERS 1 THROUGH 16 APPEAR IN THE TRANSMISSION APPLICATIONS TABLES, CATALOG SECTION P-73A

APPLICATIONS VIEWED FROM THE REAR OF THE TRANSMISSION



- A — Transmission P.T.O. Driver Gear
- B — Transmission Aperture Pad
- C — Gaskets — As Required
- D — Filler Block
- E — Adapter Gear Assembly
- F — Adapter Plate
- G — Power Take-Off

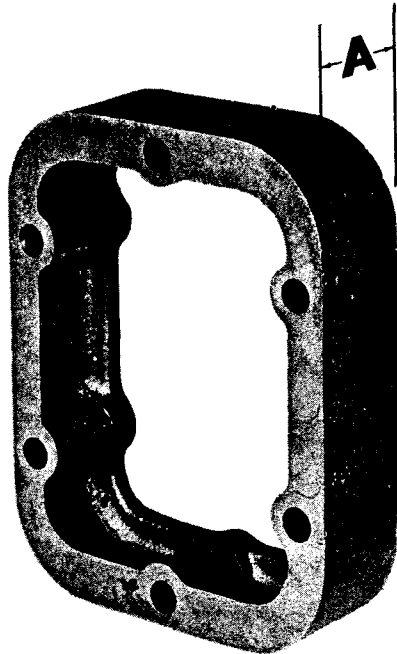
MOUNTING PARTS

FILLER BLOCKS

Filler Blocks are required as called for in the TRANSMISSION APPLICATIONS, where it is necessary to use a spacer to adapt the Power Take-Off to a particular Transmission.

Two Filler Blocks may be used in combination with one or more Gaskets between the Filler Block surfaces.

In computing the Total Thickness of the Filler Block and Gasket combination, use a factor of .012" (Compressed Thickness of a $\frac{1}{64}$ " Gasket 50-324-5) for every $\frac{1}{64}$ " Gasket required in the installation.



S.A.E. 6-BOLT FILLER BLOCKS

Part Number	"A" Thickness	Part Number	"A" Thickness	Part Number	"A" Thickness
7A-032	.032"	7A-521	.521"	7A-1300	1.300"
7A-062	.062"	7A-550	.550"	7A-1375	1.375"
7A-093	.093"	7A-562	.562"	7A-1450	1.450"
7A-125	.125"	7A-600	.600"	7A-1468	1.468"
7A-140	.140"	7A-700	.700"	7A-1500	1.500"
7A-165	.165"	7A-800	.800"	7A-1520	1.520"
7A-187	.187"	7A-875	.875"	7A-1550	1.550"
7A-200	.200"	7A-896	.896"	7A-1640	1.640"
7A-240	.240"	7A-950	.950"	7A-1750	1.750"
7A-250	.250"	7A-970	.970"	7A-1805	1.805"
7A-270	.270"	7A-1000	1.000"	7A-1875	1.875"
7A-300	.300"	7A-1100	1.100"	7A-1975	1.975"
7A-350	.350"	7A-1150	1.150"	7A-2000	2.000"
7A-400	.400"	7A-1163	1.163"	7A-2300	2.300"
7A-450	.450"	7A-1180	1.180"	7A-2400	2.400"
7A-500	.500"	7A-1250	1.250"	7A-2550	2.550"

Filler Blocks up to and including 7A-187 are made of Fiber, all others are cast iron.

S.A.E. 8-BOLT FILLER BLOCKS

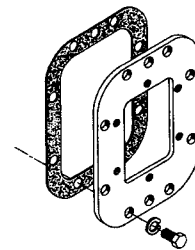
Part Number	"A" Thickness	Part Number	"A" Thickness	Part Number	"A" Thickness
8-A-062	.062"	8-A-375	.375"	8-A-900	.900"
8-A-190	.190"	8-A-410	.410"	8-A-942	.942"
8-A-248	.248"	8-A-500	.500"	8-A-1005	1.005"
8-A-295	.295"	8-A-600	.600"		

S.A.E. 8-BOLT

S.A.E. 8-Bolt Adapter Plate. Used to convert a S.A.E. 8-Bolt Aperture to a S.A.E. 6-Bolt Aperture.

Adapter Plate Part Number	"A" Thickness	Kit Number
26P-22	.375"	310778X
328422X	.248"	310778-1X (For Six Bolt single gear)
26P-27	.460"	328564X
328453X	.248"	328481X

ADAPTER PLATES



STUD AND CAPSCREW APPLICATION

Basic Model P.T.O.	Stud or Capscrew Kit	Basic Model P.T.O.	Stud or Capscrew Kit
A1, A2, A3 Series	8000-4X	42, 43 Series	328170-78X
E Series	8000-6X	D42, D43 Series	328170-79X
15 Series	328170-82X	34L	7170-3X
A22L	328170-1X	S35, S37, SR35, SR37, S45, S47, S55, S57, S95 Series	7170-2X
DA22L	328170-26X	SD35, SD37, SRD35, SRD37, SD45, SD47, SD55, SD57, SD95 Series	7170-1X
30D	7170-2X	81	328170-10X
S380, S400, 41K	328170-76X	820, 830, 840, 850, 860	328170-8X
DS380, DS400, D41K, D43, D51 Series	328170-77X		
S32 & 32 Series	7170-1X		

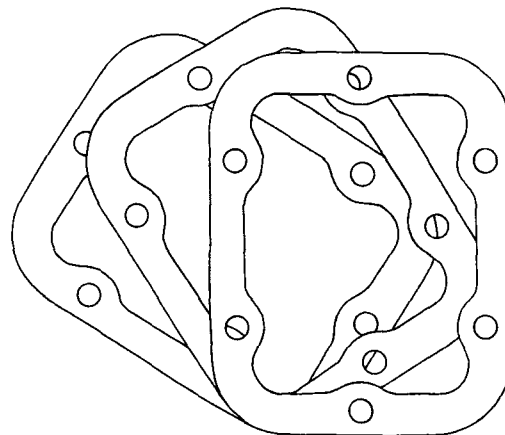
MOUNTING PARTS

GASKET KITS

Use the quantity of Gaskets as SHIMS to provide the best running condition of the Power Take-Off. If the installation is TOO TIGHT — Add Gaskets, if TOO LOOSE — Remove Gaskets.

To facilitate the handling of Gaskets these are supplied in Kits.

The lubricant in the transmission also lubricates the Power Take-Off. Therefore, one or more gasket [as required] must always be used between the metal surfaces of the Power Take-Off, Adapter Gear Assembly, Adapter Plate and Filler Block or Blocks.



S.A.E. 6 BOLT HOLE

Gasket Kit Part Number	Kit Consists of Gaskets		
	Quantity	Thickness	Part Number
328570-3X	100	.010"	35P-9-1
328570-4X	100	.020"	35P-9-2
328570-5X	50	.010"	35P-9-1
328570-6X	50	.020"	35P-9-2

S.A.E. 8 BOLT HOLE

Gasket Kit Part Number	Kit Consists of Gaskets		
	Quantity	Thickness	Part Number
328570-1X	25	.010"	35P-15-1
	25	.020"	35P-15-2
328570-2X	10	.010"	35P-15-1

Wire locking P.T.O. mounting kits for P.T.O. applications with bottom mounted power take-offs and side mounted applications that are subject to severe usage or severe torsional vibrations:

P.T.O. TYPE

PART NO. OF KIT

St'd. Mount 6-Bolt P.T.O.'s

328170-90X

"A" Series P.T.O.'s

328170-91X

St'd. Mount "A22" Series

328170-93X

30, S32 and 32 Series

328170-94X

Deep Mount 6-Bolt P.T.O.'s

328170-95X

Deep Mount "DA22" Series

328170-99X

SIX & EIGHT BOLT P.T.O. MOUNTING PARTS

Basic Model P.T.O.	Standard Stud Kit	Deep Mount Stud Kit	Cable Control Mounting Parts	Cable Control Assy. Cable & Knob	Air Shift Installation Kit
A	8000-4X	—	328380-1X	328302-10X	—
E	8000-6X	—	328048X	328302-10X	—
14	328170-74X	—	—	—	—
15	328170-28X	—	328380X	328346-10X	—
A22 Ser.	328170-1X	328170-26X	328380X	328346-10X	328388-5X
30	7170-2X	—	—	—	—
S32-32	7170-1X	—	—	—	—
S35	7170-2X	7170-1X	328478X	328346-10X	—
SR35	7170-2X	7170-1X	328475X	328346-10X	—
S380-400	328170-76X	328170-77X	328380X	328346-10X	328388-10X
41	328170-76X	328170-77X	328380X	328346-10X	328388-10X
42	328170-78X	328170-79X	328380X	328346-10X	328388-10X
43	328170-78X	328170-79X	328380X	328346-10X	—
S45	7170-2X	7170-1X	328380X	328346-10X	—
ST45	7170-2X	7170-1X	328472X	328346-10X	—
81	328170-10X	—	—	—	—
820, 830	328170-8X	—	—	—	328388-13X
840, 850, 860	328170-8X	—	—	—	—

OPTIONAL CABLE CONTROLS

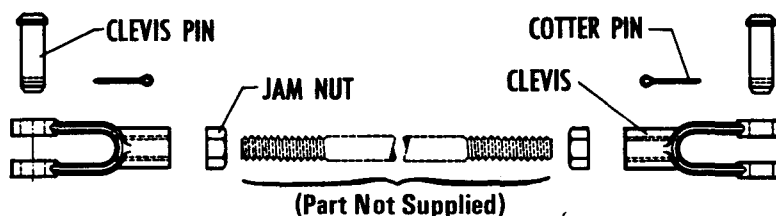
HEAVY DUTY	HEAVY DUTY VINYL	EXTRA HEAVY DUTY STAINLESS STEEL WIRE VINYL WITH WIPER
328346-15X	328545-10X	328546-10X
328346-20X	328545-15X	328546-15X
328346-25X	328545-20X	328546-20X
	328545-25X	328546-25X

Cable Knob for 328302-10X is 378459, all other cables require Knob 378502.

7174X & 7175X CLEVIS (ROD END) KIT

KITS CONSIST OF

- (2) Clevis
- (2) Clevis Pins
- (2) Cotter Pins



7174X used with 36-P-1 & 36-P-10.

7175X used with 36-P-2.

SUPPLIED IN: { 7174X Supplied in 7/16"-20 N.F. Right Hand Thread.
7175X Supplied in 1/2"-20 N.F. Right Hand Thread.

STUD KITS PARTS LIST

No. Pieces	Part No.	Description	Size
6	7170-1X	P.T.O. Stud Kit	
6	378478-10	Stud	3/8-16 & 24 x 1-1/2
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
6	7170-2X	P.T.O. Stud Kit	
6	378478-12	Stud	3/8-16 & 24 x 1-5/8
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
6	7170-3X	P.T.O. Stud Kit	
6	378478-15	Stud	3/8-16 & 24 x 1-3/4
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
6	7170-4X	P.T.O. Stud Kit	
6	378478-18	Stud	3/8-16 & 24 x 1-7/8
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
6	7170-5X	P.T.O. Stud Kit	
6	378478-20	Stud	3/8-16 & 24 x 2
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
6	7170-6X	P.T.O. Stud Kit	
6	378478-22	Stud	3/8-16 & 24 x 2-1/8
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
6	7170-7X	P.T.O. Stud Kit	
6	378478-24	Stud	3/8-16 & 24 x 2-1/4
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
6	7170-8X	P.T.O. Stud Kit	
6	378478-26	Stud	3/8-16 & 24 x 2-3/8
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
6	7170-9X	P.T.O. Stud Kit	
6	378478-28	Stud	3/8-16 & 24 x 2-1/2
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
6	7170-10X	P.T.O. Stud Kit	
6	378478-30	Stud	3/8-16 & 24 x 2-5/8
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
6	7170-11X	P.T.O. Stud Kit	
6	378478-32	Stud	3/8-16 & 24 x 2-3/4
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
6	7170-12X	P.T.O. Stud Kit	
6	378478-34	Stud	3/8-16 & 24 x 2-7/8
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
6	7170-13X	P.T.O. Stud Kit	
6	378478-36	Stud	3/8-16 & 24 x 3
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
6	7170-14X	P.T.O. Stud Kit	
6	378478-38	Stud	3/8-16 & 24 x 3-1/8
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	

No. Pieces	Part No.	Description	Size
6	7170-15X	P.T.O. Stud Kit	
6	378478-40	Stud	3/8-16 & 24 x 3-1/4
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
6	7170-16X	P.T.O. Stud Kit	
6	378478-42	Stud	3/8-16 & 24 x 3-3/8
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
6	7170-17X	P.T.O. Stud Kit	
6	378478-44	Stud	3/8-16 & 24 x 3-1/2
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
6	7170-18X	P.T.O. Stud Kit	
6	378478-46	Stud	3/8-16 & 24 x 3-5/8
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
6	7170-19X	P.T.O. Stud Kit	
6	378478-48	Stud	3/8-16 & 24 x 3-3/4
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
6	7170-20X	P.T.O. Stud Kit	
6	378478-50	Stud	3/8-16 & 24 x 3-7/8
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
6	7170-21X	P.T.O. Stud Kit	
6	378478-52	Stud	3/8-16 & 24 x 4
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
6	7170-22X	P.T.O. Stud Kit	
6	378478-54	Stud	3/8-16 & 24 x 4-1/8
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
6	7170-23X	P.T.O. Stud Kit	
6	378478-56	Stud	3/8-16 & 24 x 4-1/4
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
6	7170-24X	P.T.O. Stud Kit	
6	378478-58	Stud	3/8-16 & 24 x 4-3/8
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
6	7170-25X	P.T.O. Stud Kit	
6	378478-60	Stud	3/8-16 & 24 x 4-1/2
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
6	7170-26X	P.T.O. Stud Kit	
6	378478-62	Stud	3/8-16 & 24 x 4-5/8
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
6	7170-27X	P.T.O. Stud Kit	
6	378478-64	Stud	3/8-16 & 24 x 4-3/4
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
6	7170-28X	P.T.O. Stud Kit	
6	378478-66	Stud	3/8-16 & 24 x 4-7/8
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	

STUD KITS PARTS LIST

No. Pieces	Part No.	Description	Size
	7170-29X	P.T.O. Stud Kit	
6	378478-68	Stud	3/8-16 & 24 x 5
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
	7170-30X	P.T.O. Stud Kit	
6	378478-70	Stud	3/8-16 & 24 x 5-1/8
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
	7170-31X	P.T.O. Stud Kit	
6	378478-72	Stud	3/8-16 & 24 x 5-1/4
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
	7170-32X	P.T.O. Stud Kit	
6	378478-74	Stud	3/8-16 & 24 x 5-1/2
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
	7170-33X	P.T.O. Stud Kit	
6	378478-10	Stud	3/8-16 & 24 x 1-1/2
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
	7170-34X	P.T.O. Stud Kit	
6	378478-10	Stud	3/8-16 & 24 x 1-1/2
6	378478-12	Stud	3/8-16 & 24 x 1-5/8
12	500371-3	Stud Nut	
12	378018	Copper Bolt Gasket	
	7170-35X	P.T.O. Stud Kit	
6	378478-10	Stud	3/8-16 & 24 x 1-1/2
6	378478-15	Stud	3/8-16 & 24 x 1-3/4
12	500371-3	Stud Nut	
12	378018	Copper Bolt Gasket	
	7170-36X	P.T.O. Stud Kit	
6	378478-10	Stud	3/8-16 & 24 x 1-1/2
6	378478-18	Stud	3/8-16 & 24 x 1-7/8
12	500371-3	Stud Nut	
12	378018	Copper Bolt Gasket	
	7170-37X	P.T.O. Stud Kit	
12	378478-12	Stud	3/8-16 & 24 x 1-5/8
12	500371-3	Stud Nut	
12	378018	Copper Bolt Gasket	
	7170-38X	P.T.O. Stud Kit	
6	378478-12	Stud	3/8-16 & 24 x 1-5/8
6	378478-15	Stud	3/8-16 & 24 x 1-3/4
12	500371-3	Stud Nut	
12	378018	Copper Bolt Gasket	
	7170-39X	P.T.O. Stud Kit	
6	378478-12	Stud	3/8-16 & 24 x 1-5/8
6	378478-18	Stud	3/8-16 & 24 x 1-7/8
12	500371-3	Stud Nut	
12	378018	Copper Bolt Gasket	
	7170-40X	P.T.O. Stud Kit	
12	378478-15	Stud	3/8-16 & 24 x 1-3/4
12	500371-3	Stud Nut	
12	378018	Copper Bolt Gasket	
	7170-41X	P.T.O. Stud Kit	
6	378478-15	Stud	3/8-16 & 24 x 1-3/4
6	378478-18	Stud	3/8-16 & 24 x 1-7/8
12	500371-3	Stud Nut	
12	378018	Copper Bolt Gasket	

No. Pieces	Part No.	Description	Size
	7170-42X	P.T.O. Stud Kit	
2	378478-15	Stud	3/8-16 & 24 x 1-3/4
4	378478-20	Stud	3/8-16 & 24 x 2
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
	7170-43X	P.T.O. Stud Kit	
4	378478-15	Stud	3/8-16 & 24 x 1-3/4
2	378478-10	Stud	3/8-16 & 24 x 1-1/2
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
	7170-44X	P.T.O. Stud Kit	
2	378478-22	Stud	3/8-16 & 24 x 2-1/8
10	378478-10	Stud	3/8-16 & 24 x 1-1/2
12	500371-3	Stud Nut	
12	378018	Copper Bolt Gasket	
	7170-45X	P.T.O. Stud Kit	
2	378478-22	Stud	3/8-16 & 24 x 2-1/8
4	378478-10	Stud	3/8-16 & 24 x 1-1/2
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
	7170-46X	P.T.O. Stud Kit	
6	378478-80	Stud	3/8-16 & 24 x 6-1/4
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
	7170-47X	P.T.O. Stud Kit	
6	378478-84	Stud	3/8-16 & 24 x 6-3/4
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
	7170-48X	P.T.O. Stud Kit	
6	378478-82	Stud	3/8-16 & 24 x 6-1/2
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
	7170-49X	P.T.O. Stud Kit	
6	378478-78	Stud	3/8-16 & 24 x 6
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
	7170-50X	P.T.O. Stud Kit	
6	378478-76	Stud	3/8-16 & 24 x 5-3/4
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
	8000-1X	P.T.O. Stud Kit	
6	500398-15	Hex Capscrew	3/8-16 x 1-5/8
6	378018	Copper Bolt Gasket	
	8000-2X	P.T.O. Stud Kit	
6	500398-17	Hex Capscrew	3/8-16 x 1-7/8
6	378018	Copper Bolt Gasket	
	8000-3X	P.T.O. Stud Kit	
6	500398-19	Hex Capscrew	3/8-16 x 2-1/8
6	378018	Copper Bolt Gasket	
	8000-4X	P.T.O. Stud Kit	
6	500398-20	Hex Capscrew	3/8-16 x 2-1/4
6	378018	Copper Bolt Gasket	
	8000-5X	P.T.O. Stud Kit	
6	500398-15	Hex Capscrew	3/8-16 x 1-5/8
4	500398-10	Hex Capscrew	3/8-16 x 1
10	378018	Copper Bolt Gasket	

STUD KITS PARTS LIST

No. Pieces	Part No.	Description	Size
6	8000-6X	P.T.O. Stud Kit	
6	500398-11	Hex Capscrew	3/8-16 x 1-1/8
6	378018	Copper Bolt Gasket	
5	8000-7X	P.T.O. Stud Kit	
1	500398-15	Hex Capscrew	3/8-16 x 1-5/8
6	500700-14	Hex Capscrew	3/8-16 x 1-1/2
6	378018	Copper Bolt Gasket	
4	8000-8X	P.T.O. Stud Kit	
4	500398-12	Hex Capscrew	3/8-16 x 1-1/4
8	500398-21	Hex Capscrew	3/8-16 x 2-3/8
8	378018	Copper Bolt Gasket	
5	8000-9X	P.T.O. Stud Kit	
1	500398-20	Hex Capscrew	3/8-16 x 2-1/4
6	500398-26	Hex Capscrew	3/8-16 x 3
6	378018	Copper Bolt Gasket	
2	328291-1X	P.T.O. Stud Kit	
4	378478-34	Stud	3/8-16 & 3/8-24 x 2-7/8
4	500398-20	Hex Capscrew	3/8-16 x 2-1/4
2	500371-3	Hex Nut	3/8-24
6	378018	Copper Bolt Gasket	
2	328291-2X	P.T.O. Stud Kit	
4	378478-34	Stud	3/8-16 & 3/8-24 x 2-7/8
4	500398-21	Hex Capscrew	3/8-16 x 2-3/8
2	500371-3	Hex Nut	3/8-24
6	378018	Copper Bolt Gasket	
2	328291-3X	P.T.O. Stud Kit	
4	378478-38	Stud	3/8-16 & 3/8-24 x 3-1/8
2	500398-22	Hex Capscrew	3/8-16 x 2-1/2
6	500371-3	Hex Nut	3/8-24
6	378018	Copper Bolt Gasket	
2	328291-4X	P.T.O. Stud Kit	
4	378478-42	Stud	3/8 & 16 & 3/8-24 x 3-3/8
2	500398-24	Hex Capscrew	3/8-16 x 2-3/4
2	500371-3	Hex Nut	3/8-24
6	378018	Copper Bolt Gasket	
2	328291-5X	P.T.O. Stud Kit	
4	378478-46	Stud	3/8-16 & 3/8-24 x 3-5/8
2	500503-10	Hex Capscrew	3/8-16 x 3
2	500371-3	Hex Nut	3/8-24
6	378018	Copper Bolt Gasket	
2	328291-6X	P.T.O. Stud Kit	
4	378478-50	Stud	3/8-16 & 3/8-24 x 3-7/8
4	500398-28	Hex Capscrew	3/8-16 x 3-1/2
2	500371-3	Hex Nut	3/8-24
6	378018	Copper Bolt Gasket	
2	328291-7X	P.T.O. Stud Kit	
4	378478-66	Stud	3/8-16 & 3/8-24 x 4-5/8
4	500398-30	Hex Capscrew	3/8-16 x 4
2	500371-3	Hex Nut	3/8-24
6	378018	Copper Bolt Gasket	
2	328291-8X	P.T.O. Stud Kit	
4	378478-66	Stud	3/8-16 & 3/8-24 x 4-5/8
4	500398-31	Hex Capscrew	3/8-16 x 4-1/4
2	500371-3	Hex Nut	3/8-24
6	378018	Copper Bolt Gasket	

No. Pieces	Part No.	Description	Size
2	328291-9X	P.T.O. Stud Kit	
4	378478-70	Stud	3/8-16 & 3/8-24 x 5-1/8
2	500388-32	Hex Capscrew	3/8-16 x 4-1/2
6	500371-3	Hex Nut	3/8-24
6	378018	Copper Bolt Gasket	
2	328291-10X	P.T.O. Stud Kit	
4	378478-72	Stud	3/8-16 & 3/8-24 x 5-1/4
2	500398-33	Hex Capscrew	3/8-16 x 4-3/4
2	500371-3	Hex Nut	3/8-24
6	378018	Copper Bolt Gasket	
2	328291-11X	P.T.O. Stud Kit	
4	378478-38	Stud	3/8-16 & 3/8-24 x 3-1/8
2	500398-27	Hex Capscrew	3/8-16 x 3-1/4
2	500371-3	Hex Nut	3/8-24
6	378018	Copper Bolt Gasket	
2	328291-12X	P.T.O. Stud Kit	
4	378478-54	Stud	3/8-16 & 3/8-24 x 4-1/8
2	500398-35	Hex Capscrew	3/8-16 x 3-3/4
6	500371-3	Hex Nut	3/8-24
6	378018	Copper Bolt Gasket	
2	328291-13X	P.T.O. Stud Kit	
4	378478-24	Stud	3/8-16 & 3/8-24 x 2-1/4
2	500398-16	Hex Capscrew	3/8-16 x 1-3/4
2	500371-3	Hex Nut	3/8-24
6	378018	Copper Bolt Gasket	
2	328291-14X	P.T.O. Stud Kit	
4	378478-76	Stud	3/8-16 & 3/8-24 x 5-3/4
2	500398-35	Hex Capscrew	3/8-16 x 5-1/4
2	500371-3	Hex Nut	3/8-24
6	378018	Copper Bolt Gasket	
2	328291-15X	P.T.O. Stud Kit	
4	378478-30	Stud	3/8-16 & 3/8-24 x 2-5/8
2	500398-18	Hex Capscrew	3/8-16 x 2
2	500371-3	Hex Nut	3/8-24
6	378018	Copper Bolt Gasket	
2	328291-16X	P.T.O. Stud Kit	
2	378478-20	Stud	3/8-16 & 3/8-24 x 2
1	378478-34	Stud	3/8-16 & 3/8-24 x 2-7/8
1	500398-14	Hex Capscrew	3/8-16 x 1-1/2
1	500398-17	Hex Capscrew	3/8-16 x 1-7/8
4	500398-20	Hex Capscrew	3/8-16 x 2-1/4
2	500503-12	Allen Capscrew	3/8-16 x 2-1/2
2	500371-3	Hex Nut	3/8-24
6	378018	Copper Bolt Gasket	
2	328291-17X	P.T.O. Stud Kit	
4	378478-58	Stud	3/8-16 & 3/8-24 x 4-3/8
2	500503-6	Hex Capscrew	3/8-16 x 4
2	500371-3	Hex Nut	3/8-24
6	378018	Copper Bolt Gasket	
2	328291-18X	P.T.O. Stud Kit	
4	378478-22	Stud	3/8-16 & 3/8-24 x 2-3/4
2	500398-20	Hex Capscrew	3/8-16 x 2-1/4
2	500371-3	Hex Nut	3/8-24
6	378018	Copper Bolt Gasket	
2	328291-19X	P.T.O. Stud Kit	
1	378478-18	Stud	3/8-16 & 3/8-24 x 1-7/8
2	378048-3	Safety Wire	9
2	330183-12	Hex Capscrew w/ hole in head	3/8-16 x 1-1/4
2	500398-12	Hex Capscrew	3/8-16 x 1-1/4
2	500371-3	Hex Head Nut	3/8-24
4	500357-11	Lockwasher	3/8

STUD KITS PARTS LIST

No. Pieces	Part No.	Description	Size
	328291-20X	P.T.O. Stud Kit	
1	378048-3	Safety Wire	9
2	330183-12	Hex Capscrew w/hole in head	3/8-16 x 1-1/4
2	500398-12	Hex Capscrew	3/8-16 x 1-1/4
4	500357-11	Lockwasher	3/8
	328291-21X	P.T.O. Stud Kit	
2	378478-20	Stud	3/8-16 & 24 x 2
1	378048-3	Safety Wire	9
2	378236-16	Hex Capscrew w/hole in head	3/8-16 x 1-3/4
2	500398-16	Hex Capscrew	3/8-16 x 1-3/4
2	500371-3	Hex Nut	3/8-24
4	500357-11	Lockwasher	3/8
	328170-1X	P.T.O. Stud Kit	
2	378478-15	Stud	3/8-16 & 24 x 1-3/4
1	378041-4	Hex Capscrew	3/8-16 x 7
2	500398-12	Hex Capscrew	3/8-16 x 1-1/4
1	500398-30	Hex Capscrew	3/8-16 x 4
2	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
	328170-2X	P.T.O. Stud Kit	
6	378478-10	Stud	3/8-16 & 24 x 1-1/2
4	378478-12	Stud	3/8-16 & 24 x 1-5/8
1	378041-4	Cap Screw	3/8-16 x 7
1	500398-30	Cap Screw	3/8-16 x 4
10	500371-3	Stud Nut	
12	378018	Copper Bolt Gasket	
	328170-3X	P.T.O. Stud Kit	
4	378478-38	Stud	3/8-16 & 24 x 3-1/8
1	378041-6	Cap Screw	
1	500398-36	Cap Screw	
4	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
	328170-4X	P.T.O. Stud Kit	
4	378478-30	Stud	3/8-16 & 24 x 2-5/8
1	378041-5	Cap Screw	
1	500398-34	Cap Screw	
4	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
	328170-5X	P.T.O. Stud Kit	
4	378478-60	Stud	3/8-16 & 24 x 4-1/2
1	378041-4	Cap Screw	3/8-16 x 7
1	378041-7	Cap Screw	
4	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
	328170-6X	P.T.O. Stud Kit	
2	378478-8	Stud	3/8-16 & 24 x 1-7/16
2	378478-14	Stud	3/8-16 & 24 x 1-5/8
2	500398-12	Cap Screw	
4	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	
	328170-7X	P.T.O. Stud Kit	
8	378496-31	Stud	7/16-14 & 20 x 2-3/4
8	500357-12	Stud Nut	
8	500371-4	Stud Nut	7/16
2	378175	Dowel Pin	2" Long
	328170-8X	P.T.O. Stud Kit	
8	378496-19	Stud	7/16-14 & 20 x 2
8	500371-4	Stud Nut	7/16
8	500357-12	Lock Washer	
2	378054	Dowel Pin	

No. Pieces	Part No.	Description	Size
	328170-9X	P.T.O. Stud Kit	
1	330426-2	Stud	7/16-14 & 20 x 2-5/8
5	378496-30	Stud	7/16-14 & 20 x 2-5/8
1	500398-12	Cap Screw	3/8
2	500411-17	Cap Screw	7/16
3	22-P-22	Adapter Plate Gasket	
3	22-P-27	Adapter Plate Gasket	
1	26-P-20	Adapter Plate	
8	500371-4	Stud Nut	7/16
1	500357-11	Lock Washer	3/8
8	500357-12	Lock Washer	7/16
	328170-10X	P.T.O. Stud Kit	
2	378496-19	Stud	7/16-14 & 7/16-20 x 2
2	378496-67	Stud	7/16-14 & 7/16-20 x 5
4	378496-69	Stud	7/16-14 & 7/16-20 x 5-1/4
8	500371-4	Stud Nut	
8	500357-12	Lock Washer	
2	378054	Dowel Pin	
	328170-11X	P.T.O. Stud Kit	
6	500398-10	Screw	3/8-16 x 1
6	378018	Copper Bolt Gasket	
	328170-12X	P.T.O. Stud Kit	
8	378496-37	Stud	7/16-14 & 20 x 3-1/8
2	378175	Dowel	
8	500371-4	Stud Nut	
8	500357-12	Lock Washer	
	328170-13X	P.T.O. Stud Kit	
8	378496-39	Stud	7/16-14 & 20 x 3-1/4
2	378175	Dowel	
8	500371-4	Stud Nut	
8	500357-12	Lock Washer	
	328170-14X	P.T.O. Stud Kit	
8	378496-27	Stud	.438-14-20 x 2.500
2	378057	Dowel	
8	500371-4	Stud Nut	
8	500357-12	Lock Washer	
	328170-15X	P.T.O. Stud Kit	
8	378496-21	Stud	7/16-14 & 20 x 2-1/8
2	378054	Dowel	
8	500371-4	Stud Nut	
8	500357-12	Lock Washer	
	328170-16X	P.T.O. Stud Kit	
8	378496-30	Stud	7/16-14 & 7/16-20 x 2-5/8
2	378174	Dowel	
8	500371-4	Stud Nut	
8	500357-12	Lock Washer	
	328170-17X	P.T.O. Stud Kit	
8	378496-26	Stud	7/16-14 & 20 x 2-3/8
2	378057	Dowel	
8	500371-4	Nut	
8	500357-12	Lock Washer	
	328170-18X	P.T.O. Stud Kit	
8	378496-36	Stud	7/16-14 & 20 x 3
2	378175	Dowel	
8	500371-4	Stud Nut	
8	500357-12	Lock Washer	
	328170-19X	P.T.O. Stud Kit	
2	378478-30	Stud	3/8-16 & 24 x 2-5/8
2	378478-32	Stud	3/8-16 & 24 x 2-3/4
2	378478-34	Stud	3/8-16 & 24 x 2-7/8
6	500371-3	Stud Nut	
6	378018	Copper Bolt Gasket	

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No. Pieces	Part No.	Description	Size
	328170-20X	P.T.O. Stud Kit	
2	500399-16	Cap Screw	7/16-14 x 1-3/4
2	500399-34	Cap Screw	7/16-14 x 5
4	500399-35	Cap Screw	7/16-14 x 5-1/4
2	22-P-26-1	Gasket	.010
2	22-P-26-2	Gasket	.020
2	378174	Dowel Pin	
8	500357-12	Lock Washer	
	328170-21X	P.T.O. Stud Kit	
2	500399-14	Cap Screw	7/16-14 x 1-1/2
2	500399-33	Cap Screw	7/16-14 x 4-3/4
4	500399-34	Cap Screw	7/16-14 x 5
2	22-P-26-1	Gasket	.010
2	22-P-26-2	Gasket	.020
2	378057	Dowel Pin	
8	500357-12	Lock Washer	
	328170-22X	P.T.O. Stud Kit	
2	500399-22	Cap Screw	.438-16 x 2-1/2
2	500399-36	Cap Screw	.438-16 x 5-1/2
4	500399-37	Cap Screw	.438-16 x 5-3/4
2	22-P-26-1	Gasket	.010
2	22-P-26-1	Gasket	.020
2	378175	Dowel Pin	
8	500357-12	Lock Washer	
	328170-23X	P.T.O. Stud Kit	
2	500399-20	Cap Screw	7/16-14 x 2-1/4
2	500399-35	Cap Screw	7/16-14 x 5-1/4
4	500399-36	Cap Screw	7/16-14 x 5-1/2
2	22-P-26-1	Gasket	.010
2	22-P-26-2	Gasket	.020
2	378175	Dowel Pin	
8	500357-12	Lock Washer	
	328170-24X	P.T.O. Stud Kit	
3	330274-2	Stud	
1	4-P-64	Spacer	
1	500403-9	Bolt	
1	500357-17	Lock Washer	
	328170-25X	P.T.O. Stud Kit	
6	378655	Stud	
3	4-P-64	Spacer	
2	500403-9	Bolt	
1	500371-6	Nut	
1	500357-14	Lock Washer	
2	500357-17	Lock Washer	
	328170-26X	P.T.O. Stud Kit	
2	378478-14	Stud	3/8-16 & 24 x 1-5/8
1	378041-15	Hex Cap Screw	3/8-16 x 6.750
2	500398-10	Hex Cap Screw	3/8-16 x 1.000
1	500398-29	Hex Cap Screw	3/8-16 x 3.750
2	500371-3	Stud Nut	3/8-16 x 24
6	378018	Copper Bolt Gasket	
	328170-27X	P.T.O. Stud Kit	
4	50-P-16	Bracket	
12	378031	Cap Screw	
12	500370-5	Nut	
12	500356-13	Lock Washer	
	328170-28X	P.T.O. Stud Kit	
1	330187-6	Stud	
4	378478-34	Stud	3/8-16 & 24 x 2-7/8
1	500398-34	Cap Screw	3/8-16 x 5.000
5	500371-3	Nut	3/8-24
6	378018	Copper Bolt Gasket	

No. Pieces	Part No.	Description	Size
	328170-29X	P.T.O. Stud Kit	
4	378478-12	Stud	3/8-16 & 24 x 1-5/8
6	378478-20	Stud	3/8-16 & 24 x 2
1	378041-4	Cap Screw	
1	500398-30	Cap Screw	
10	500371-3	Stud Nut	3/8-24
12	378018	Copper Bolt Gasket	
	328170-30X	P.T.O. Stud Kit	
4	378478-12	Stud	3/8-16 & 24 x 1-5/8
6	378478-15	Stud	3/8-16 & 24 x 1-3/4
1	378041-4	Cap Screw	
1	500398-30	Cap Screw	
10	500357-3	Nut	3/8-24
12	378018	Copper Bolt Washer	
	328170-31X	P.T.O. Stud Kit	
4	378478-52	Stud	3/8-16 & 24 x 4
1	378478-105	Stud	3/8-16 & 24 x 9-3/4
1	500398-38	Cap Screw	
5	500371-3	Nut	3/8-24
6	378018	Copper Bolt Washer	
	328170-32X	P.T.O. Stud Kit	
4	378478-48	Stud	3/8-16 & 24 x 3-3/4
1	378478-103	Stud	3/8-16 & 24 x 9-1/2
1	500378-38	Cap Screw	
5	500371-3	Nut	3/8-24
6	378018	Copper Bolt Gasket	
	328170-33X	P.T.O. Stud Kit	
4	378478-26	Stud	3/8-16 & 24 x 2-3/8
1	378041-9	Cap Screw	
1	500398-33	Cap Screw	3/8-16 x 4-3/4
4	500371-3	Nut	3/8-24
6	378018	Copper Bolt Gasket	
	328170-34X	P.T.O. Stud Kit	
1	330187-10	Stud	
4	378478-72	Stud	3/8-16 & 24 x 5-1/4
1	378041-9	Cap Screw	
5	500371-3	Nut	3/8-24
6	378018	Copper Bolt Washer	
	328170-35X	P.T.O. Stud Kit	
4	378478-22	Stud	3/8-16 & 24 x 2-1/8
1	378041-8	Cap Screw	
1	500398-31	Cap Screw	3/8-16 x 4-1/4
4	500371-3	Nut	3/8-24
6	378018	Copper Bolt Gasket	
	328170-36X	P.T.O. Stud Kit	
4	378478-70	Stud	3/8-16 & 24 x 5-1/8
1	378041-8	Cap Screw	
1	378041-13	Cap Screw	
4	500371-3	Nut	3/8-24
6	378018	Copper Bolt Gasket	
	328170-37X	P.T.O. Stud Kit	
4	378478-66	Stud	3/8-16 & 24 x 4-7/8
1	378041-4	Cap Screw	
1	378041-7	Cap Screw	
4	500371-3	Nut	3/8-24
6	378018	Copper Bolt Gasket	
	328170-38X	P.T.O. Stud Kit	
4	378478-78	Stud	3/8-16 x 3/8-24 x 6
1	378478-97	Stud	3/8-16 x 3/8-24 x 8-1/4
1	378478-123	Stud	3/8-16 x 3/8-24 x 11-3/4
6	500371-3	Nut	3/8-24
6	378018	Copper Bolt Gasket	

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No. Pieces	Part No.	Description	Size
	328170-39X	P.T.O. Stud Kit	
1	330187-7	Stud	3/8-16 x 3/8-24 x 9-1/2
1	330187-15	Stud	3/8-16 x 3/8-24 x 12-1/2
4	378478-84	Stud	3/8-16 x 3/8-24 x 6-3/4
6	500371-3	Nut	3/8-24
6	378018	Copper Bolt Washer	
	328170-40X	P.T.O. Stud Kit	
1	330187-14	Stud	3/8-16 x 3/8-24 x 12
1	330187-16	Stud	3/8-16 x 3/8-24 x 9-1/4
4	378478-82	Stud	3/8-16 x 3/8-24 x 6-1/2
6	500371-3	Nut	3/8-24
6	378018	Copper Bolt Washer	
	328170-41X	P.T.O. Stud Kit	
4	378478-58	Stud	3/8-16 & 24 x 4-3/8
1	378041-3	Cap Screw	
1	378041-7	Cap Screw	
4	500371-3	Nut	3/8-24
6	378018	Copper Bolt Gasket	
	328170-42X	P.T.O. Stud Kit	
1	330187-7	Stud	
4	378478-46	Stud	3/8-16 & 24 x 3-5/8
1	500398-38	Cap Screw	
5	500371-3	Nut	3/8-24
6	378018	Copper Washer	
	328170-43X	P.T.O. Stud Kit	
4	378496-27	Stud	7/16-14 & 20 x 2-1/2
4	500399-18	Hex Capscrew	7/16-14 x 1-1/2
4	500371-4	Hex Nut	7/16-20
2	378057	Dowel Pin	
8	500357-12	Lock Washer	
	328170-44X	P.T.O. Stud Kit	
8	378496-19	Stud	7/16-14 & 20 x 2
4	378506	Stud	
8	500371-4	Nut	7/16-20
2	378054	Dowel Pin	
8	500357-12	Lock Washer	
	328170-45X	P.T.O. Stud Kit	
8	378496-19	Stud	7/16-14 & 20 x 2
2	378506	Stud	
8	500371-4	Nut	7/16-20
2	378054	Dowel Pin	
8	500357-12	Lock Washer	
	328170-46X	P.T.O. Stud Kit	
6	378478-77	Stud	3/8-16 & 24 x 6-1/4
6	500371-3	Hex Nut	3/8-24
6	378018	Copper Bolt Gasket	
	328170-47X	P.T.O. Stud Kit	
6	378478-75	Stud	3/8-16 & 24 x 6
6	500371-3	Hex Nut	3/8-24
6	378018	Copper Bolt Washer	
	328170-48X	P.T.O. Stud Kit	
6	378478-51	Stud	3/8-16 & 24 x 4
6	500371-3	Nut	3/8-24
6	378018	Copper Bolt Washer	
	328170-49X	P.T.O. Stud Kit	
6	378478-35	Stud	3/8-16 & 24 x 3
6	500371-3	Nut	3/8-24
6	378018	Copper Bolt Washer	

No. Pieces	Part No.	Description	Size
	328170-50X	P.T.O. Stud Kit	
6	378478-67	Stud	3/8-16 & 24 x 5
6	500371-3	Nut	3/8-24
6	500357-11	Lock Washer	
	328170-51X	P.T.O. Stud Kit	
6	378478-59	Stud	3/8-16 & 24 x 4-1/2
6	500371-3	Nut	
6	378018	Copper Bolt Washer	
	328170-52X	P.T.O. Stud Kit	
6	378478-43	Stud Kit	3/8-16 & 24 x 3-1/2
6	500371-3	Nut	3/8-24
6	378018	Copper Bolt Gasket	
	328170-53X	P.T.O. Stud Kit	
6	378478-55	Stud	3/8-16 & 24 x 4-1/4
6	500371-3	Nut	3/8-24
6	378018	Copper Bolt Gasket	
	328170-54X	P.T.O. Stud Kit	
6	378478-33	Stud	3/8-16 & 24 x 2-7/8
6	500371-3	Nut	3/8-24
6	378018	Copper Bolt Gasket	
	328170-55X	P.T.O. Stud Kit	
6	378478-16	Stud	3/8-16 & 24 x 1-3/4
6	500371-3	Hex Nut	3/8-24
6	378018	Copper Washer	
	328170-56X	P.T.O. Stud Kit	
4	378478-22	Mounting Stud	3/8-16 & 3/8-24 x 2-1/8
2	501188-12	Socket Head Capscrew	3/8-16 x 2-1/2
4	500371-3	Hex Nut	3/8-24
6	378018	Copper Washer	
	328170-57X	P.T.O. Stud Kit	
6	378478-71	Stud	3/8-16 & 24 x 5-1/2
6	500371-3	Hex Nut	3/8-24
6	378018	Copper Washer	
	328170-58X	P.T.O. Stud Kit	
6	378478-31	Stud	3/8-16 & 24 x 2-3/4
6	500371-3	Hex Nut	3/8-24
6	378018	Copper Washer	
	328170-59X	P.T.O. Stud Kit	
6	378478-39	Stud	3/8-16 & 24 x 3-1/4
6	500371-3	Hex Nut	3/8-24
6	378018	Copper Washer	
	328170-60X	P.T.O. Stud Kit	
6	378478-47	Stud	3/8-16 & 24 x 3-3/4
6	500371-3	Hex Nut	3/8-24
6	378018	Copper Washer	
	328170-61X	P.T.O. Stud Kit	
6	378478-63	Stud	3/8-16 & 24 x 4-3/4
6	500371-3	Hex Nut	3/8-24
6	378018	Copper Washer	
	328170-62X	P.T.O. Stud Kit	
6	378478-69	Stud	3/8-16 & 24 x 5-1/4
6	500371-3	Hex Nut	3/8-24
6	378018	Copper Washer	
	328170-63X	P.T.O. Stud Kit	
6	378478-27	Stud	3/8-16 & 24 x 2-1/2
6	500371-3	Hex Nut	3/8-24
6	378018	Copper Washer	

STUD KITS PARTS LIST

No. Pieces	Part No.	Description	Size
6	328170-64X	P.T.O. Stud Kit	
6	378478-19	Stud	3/8-16 & 24 x 2
6	500371-3	Hex Nut	3/8-24
6	378018	Copper Washer	
6	328170-65X	P.T.O. Stud Kit	
6	378478-21	Stud	3/8-16 & 24 x 2-1/8
6	500371-3	Hex Nut	3/8-24
6	378018	Copper Washer	
8	328170-66X	P.T.O. Stud Kit	
8	500399-10	Hex Capscrew	7/16-14 x 1
2	378054	Dowel	7/16 x 1
8	500357-12	Lock Washer	7/16
8	328170-67X	P.T.O. Stud Kit	
8	500399-12	Hex Capscrew	7/16 x 1-1/4
2	378054	Dowel	7/16 x 1
8	500357-12	Lock Washer	7/16
4	328170-68X	P.T.O. Stud Kit	
4	378478-18	Mounting Stud	3/8-16 & 3/8-24 x 1-7/8
2	501188-11	Socket Head Capscrew	3/8-16 x 2-1/4
4	500371-3	Hex Nut	3/8-24
6	378018	Copper Washer	
4	328170-70X	P.T.O. Stud Kit	
4	378478-12	Mounting Stud	3/8-16 & 3/8-24 x 1-5/8
2	5001188-10	Socket Head Capscrew	3/8-16 x 2
4	500371-3	Hex Nut	3/8-24
6	378018	Copper Washer	
3	328170-72X	P.T.O. Stud Kit	
3	500398-9	Hex Capscrew	3/8-16 x 7/8
1	500398-12	Hex Capscrew	3/8-16 x 1-1/4
2	500503-12	Allen Capscrew	3/8-16 x 2-1/2
2	378087	Allen Lock Washer	
1	378130	Tab Lock Washer	
3	378018	Copper Bolt Gasket	
2	328170-73X	P.T.O. Stud Kit	
2	378478-14	Stud	3/8-16 & 24 x 1-5/8
1	500398-12	Hex Capscrew	3/8-16 x 1-1/4
1	500398-14	Hex Capscrew	3/8-16 x 1-1/2
2	500503-10	Allen Capscrew	3/8-16 x 2
2	500371-3	Hex Nut	3/8-24
2	378087	Allen Lock Washer	
1	378130	Tab Lock Washer	
3	378018	Copper Bolt Gasket	
3	328170-74X	P.T.O. Stud Kit	
3	500398-9	Hex Capscrew	3/8-16 x 7/8
1	500398-12	Hex Capscrew	3/8-16 x 1-1/4
2	500503-9	Allen Capscrew	3/8-16 x 1-3/4
2	378087	Allen Lock Washer	
1	378130	Tab Lock Washer	
3	378018	Copper Bolt Gasket	
2	328170-75X	P.T.O. Stud Kit	
2	378480-9	Stud	3/8-16 x 3/8-24 x 1-1/2
3	378480-12	Stud	3/8-16 x 3/8-24 x 1-5/8
1	500398-27	Hex Capscrew	3/8-16 x 3-1/4
5	500371-3	Hex Nut	3/8-24
6	378018	Copper Bolt Gasket	
6	328170-76X	P.T.O. Stud Kit	
6	378478-14	Stud	3/8-16 & 24 x 1-5/8
6	500371-3	Hex Nut	3/8-24
6	378018	Copper Bolt Gasket	

No. Pieces	Part No.	Description	Size
3	328170-77X	P.T.O. Stud Kit	
3	378478-8	Stud	3/8-16 & 24 x 1-7/16
3	500398-10	Hex Capscrew	1.000 Long
3	500371-3	Hex Nut	3/8-24
6	378018	Copper Bolt Gasket	
4	328170-78X	P.T.O. Stud Kit	
4	378478-14	Stud	3/8-16 & 24 x 1-5/8
2	378480-12	Shoulder Stud	3/8-16 & 24 x 1-5/8
6	500371-3	Hex Nut	3/8-24
6	378018	Copper Bolt Gasket	
2	328170-79X	P.T.O. Stud Kit	
2	378478-8	Stud	3/8-16 & 24 x 1-7/16
2	378480-9	Shoulder Stud	3/8-16 & 24 x 1-1/2
2	500398-10	Hex Capscrew	3/8-16 x 1.000 Long
4	500371-3	Hex Nut	3/8-24
6	378018	Copper Bolt Gasket	
4	328170-81X	P.T.O. Stud Kit	
4	500398-10	Hex Capscrew 3/8-16 x 1	
2	5001188-8	Allen Capscrew	3/8-16 x 1-1/2
2	378087	Allen Lock Washer	3/8
4	500357-11	Lock Washer	3/8
3	328170-82X	P.T.O. Stud Kit	
3	378478-8	Housing Stud	3/8-16 & 24 x 1-7/16
1	378478-14	Housing Stud	3/8-16 & 24 x 1-5/8
2	500398-12	Hex Bolt	3/8-16 x 1-1/4
4	500371-3	Hex Nut	3/8-24
6	378018	Copper Gasket	3/8
4	328170-83X	P.T.O. Stud Kit	
4	378478-44	Stud	3/8-24 - 3/8-16 x 3.500
1	378478-78	Stud	3/8-24 - 3/8-16 x 6.000
1	378478-101	Stud	3/8-24 - 3/8-16 x 9.250
6	500371-3	Hex Nut	3/8-24
6	378018	Copper Bolt Gasket	
1	328170-84X	P.T.O. Stud Kit	
1	378478-8	Mounting Stud	3/8-16 - 3/8-24 x 1-7/16
3	500398-12	Hex Capscrew	3/8-16 x 1-1/4
1	500398-31	Hex Capscrew	3/8-16 x 4-1/4
1	501188-9	Allen Capscrew	3/8-16 x 1-3/4
1	500371-3	Hex Nut	3/8-24
1	500357-11	Lock Washer	3/8
5	378018	Copper Bolt Gasket	
3	328170-85X	P.T.O. Stud Kit	
3	500398-9	Hex Capscrew	3/8-16 x 7/8
1	500398-12	Hex Capscrew	3/8-16 x 1-1/4
2	500503-9	Allen Capscrew	
2	378087	Allen Lock Washer	
1	378130	Lock Washer	
3	378018	Copper Bolt Gasket	
1	328170-86X	P.T.O. Stud Kit	
1	378478-14	Stud	3/8-16 - 3/8-24 x 1-5/8
3	500398-12	Hex Capscrew	3/8-16 x 1-1/4
2	501188-9	Allen Capscrew	3/8-16 x 1-3/4
1	500371-3	Hex Stud Nut	3/8-24
2	500357-11	Lock Washer	3/8
4	378018	Copper Bolt Gasket	3/8
2	328170-87X	P.T.O. Stud Kit	
2	378478-14	Stud	3/8-16 - 3/8-24 x 1-5/8
1	500398-12	Hex Capscrew	3/8-16 x 1-1/4
1	500398-14	Hex Capscrew	3/8-16 x 1-1/2
2	500503-10	Allen Capscrew	
2	500371-3	Hex Nut	3/8-24
2	378087	Lock Washer	
1	378130	Tab Lock Washer	
3	378018	Copper Bolt Gasket	3/8

STUD KITS PARTS LIST

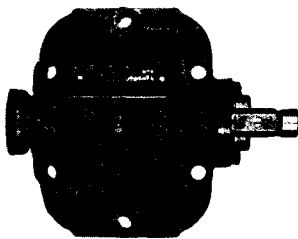
No. Pieces	Part No.	Description	Size
	328170-88X	P.T.O. Stud Kit	
2	378478-14	Stud	3/8-16 - 3/8-24 x 1-5/8
1	500398-12	Hex Capscrew	3/8-16 x 1-1/4
1	500398-14	Hex Capscrew	3/8-16 x 1-1/2
2	500503-9	Allen Capscrew	3/8-16 x 2
2	500371-3	Hex Nut	3/8-24
2	378087	Lock Washer	3/8
1	378130	Tab Lock Washer	3/8
3	378018	Copper Washer	3/8
	328170-89X	P.T.O. Stud Kit	
2	378478-30	Stud	3/8-16 - 3/8-24 x 2-5/8
1	500398-20	Hex Capscrew	3/8-16 x 2-1/4
1	500398-22	Hex Capscrew	3/8-16 x 2-1/2
2	500503-14	Allen Capscrew	3/8-16 x 3
2	500371-3	Hex Nut	3/8
2	378087	Allen Lock Washer	3/8
1	378130	Tab Lock Washer	3/8
3	378018	Copper Washer	3/8
	328170-90X	P.T.O. Stud Kit	
6	378775	Stud	3/8-16 & 24 x 1-3/4
6	500371-3	Hex Nut	3/8-24
6	378774	Tab Lock Washer	
1	378048-5	Lock Wire	24
	328170-91X	P.T.O. Stud Kit (Special Wired)	
6	378777	Hex Capscrew	3/8-16 x 2-1/4
6	500357-11	Lock Washer	3/8
1	378048-5	Lock Wire	24
	328170-92X	P.T.O. Stud Kit (Special Wired)	
6	378782	Hex Capscrew	3/8-16 x 1-1/8
6	500357-11	Lock Washer	3/8
1	378048-5	Lock Wire	24
	328170-93X	P.T.O. Stud Kit (Special Wired)	
4	378775	Stud	3/8-16 & 24 x 1-3/4
1	378779	Hex Capscrew	3/8-16 x 4
1	378781	Hex Capscrew	3/8-16 x 7
4	500371-3	Hex Nut	3/8-24
4	378774	Tab Lock Washer	
1	378048-6	Lock Wire	48
2	378018	Copper Washer	3/8
	328170-94X	P.T.O. Stud Kit (Special Wired)	
6	378783	Stud	3/8-16 & 24 x 1-5/8
6	500371-3	Hex Nut	3/8-24
6	378774	Tab Lock Washer	
1	378048-5	Lock Wire	24
	328170-95X	P.T.O. Stud Kit (Special Wired)	
6	378776	Stud	3/8-16 & 24 x 1-1/2
6	500371-3	Hex Nut	3/8-24
6	378774	Tab Lock Washer	
1	378048-5	Lock Wire	24

No. Pieces	Part No.	Description	Size
	328170-96X	P.T.O. Stud Kit (Special Wired)	
2	378472	Stud	3/8-24 - 3/8-16 x 1-3/4
1	378041-18	Hex Capscrew	3/8-16 x 7
2	330183-12	Hex Capscrew	3/8-16 x 1-1/4
1	330183-30	Hex Capscrew	3/8-16 x 4
2	378219	Castle Nut	3/8-24
6	378018	Copper Washer	3/8
	328170-96X	P.T.O. Stud Kit (Special Wired)	
2	378472	Stud	3/8-24 - 3/8-16 x 1-3/4
2	330183-12	Hex Capscrew	3/8-16 x 1-1/4
1	330183-30	Hex Capscrew	3/8-16 x 4
1	378041-18	Hex Capscrew	3/8-16 x 7
2	378219	Castle Nut	3/8-24
6	378018	Copper Washer	3/8
	328170-97X	P.T.O. Stud Kit	
2	378478-10	Stud	3/8-16 - 3/8-24 x 1.500
2	378478-12	Stud	3/8-16 - 3/8-24 x 1.625
1	378041-10	Hex Capscrew	3/8-16 x 8-1/4
4	500371-3	Hex Nut	3/8-24
5	378018	Copper Washer	
	328170-98X	P.T.O. Stud Kit	
3	378478-14	Stud	3/8-16 - 3/8-24 x 1-5/8
3	500398-12	Hex Capscrew	3/8-16 x 1-1/4
3	500371-3	Hex Nut	3/8-24
6	378018	Copper Washer	
	328170-99X	P.T.O. Stud Kit (Special Wired)	
4	378783	Stud	3/8-16 & 24 x 1-5/8
1	378778	Hex Capscrew	3/8-16 x 3-3/4
1	378780	Hex Capscrew	3/8-16 x 6-3/4
4	500371-3	Hex Nut	3/8-24
4	378774	Tab Lock Washer	
1	378048-6	Lock Wire	48
2	378018	Copper Washer	3/8
	328170-100X	P.T.O. Stud Kit	
4	378478-71	Stud	3/8-16 - 3/8-24 x 5.500
1	378041-9	Capscrew	3/8-16 x 7.625
1	378041-14	Capscrew	3/8-16 x 10.625
4	500371-3	Hex Nut	3/8-24
6	378018	Copper Washer	3/8
	328170-101X	P.T.O. Stud Kit	
3	378480-9	Stud	3/8-18, 3/8-24 x 1.500
2	378480-12	Stud	3/8-18, 3/8-24 x 1.625
1	500398-27	Hex Capscrew	3/8-16 x 3.250
5	500371-3	Hex Nut	3/8-24
6	378018	Copper Washer	3/8
	328170-102X	P.T.O. Stud Kit	
4	378478-18	Stud	3/8-16, 3/8-24 x 1.875
1	378041-8	Capscrew	3/8-16 x 7.250
1	500398-31	Capscrew	3/8-16 x 4.250
4	500371-3	Hex Nut	3/8-24
6	378018	Copper Washer	3/8

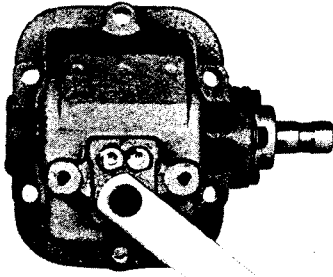
REDUCE P.T.O. INVENTORIES WITH POWER TAKE OFF KITS

*in 4 minutes time you can
assemble any one of the P.T.O.'s
shown to*

*fit 95% of all trucks with 11 different
gears and 2 basic housing assemblies*



LEVER CONTROL



WIRE CONTROL

A1-2-3 Series

one gear - single speed

CONSIDER THESE AMAZING FEATURES

- Needle Bearing
- Anti-Friction ball thrust bearings.
- E-Z Shift Positive Lock Wire Control or Rod Shift Lever Control.
- One Housing for front or rear gear position.

Lever Control Housing Assembly Kits

328324-20X Heavy Duty

Wire Control Housing Assembly Kits

Gear Front	Gear Rear	
328324-14X	328324-15X	Light Duty
328324-16X	328324-17X	Heavy Duty

ADVANTAGES

- Lower PTO Inventory
- Higher Stock Turnover
- No Lost Sales
- Interchangeability of Parts
- Gears serve as Pitch Gauges

All Kits consist of P.T.O. Case, Shifting Parts, Bearings, Cable Control and Mounting Parts.

A1, A2 & A3 SERIES APPLICATION CHART

SIDE	TRANSMISSION MAKE & MODEL	GEAR & SHAFT KIT	NEEDLE BEARING & WIRE CONTROL	
			Gear Forward	Gear Rear
R or L	New Process (Spur)	K*2-P-403	A1BDWN-1	A1BDWN-2
R	Warner T-9, T-97	K*2-P-403	A1BDWN-1	A1BDWN-2
R or L	New Process (Spur) & Warner T-97	K*2-P-403	A1BWN-1	A1BWN-2
R	Warner T-98 (LH Helix)	K*2-P-410	A1CWN-1	A1CWN-2
R	420 New Process (Helix)	K*2-P-409	A1CDWN-1	A1CDWN-2
R	Warner T-98A (RH Helix)	K*2-P-407	A1CFWN-1	A1CFWN-2
L	New Process 205 T.C.	K*2-P-367	A1KHWN-1	A1KHWN-2
R	435 New Process (Helix)	K*2-P-411	A2ARWN-1	A2ARWN-2
R or L	Spicer 3150, 3550 & 3850	K*2-P-399	A2EHWN-1	A2EHWN-2
R or L	New Process 435D	K*2-P-405	A2GDWN-1	A2GDWN-2
L	Spicer 3152 (RH Helix)	K*2-P-402	A2HWN-1	A2HWN-2
L	Chevrolet 4-Speed (Helix)	K*2-P-402	A2HWN-1	A2HWN-2
R or L	Spicer 3150 Series	K*2-P-404	A2K7WN-1	A2K7WN-2
R or L	Chevrolet 4-Speed & GMC	K*2-P-354	A2MHWN-1	A2MHWN-2
R	540 New Process (Helix)	K*2-P-412	A2RWN-1	A2RWN-2
R or L	Universal 5-Pitch (Spur)	K*2-P-413	A3CWN-1	A3CWN-2
R or L	Universal 6-Pitch (Spur)	K*2-P-414	A3DWN-1	A3DWN-2
L	Chevrolet 4-Speed (Spur)	K*2-P-415	A3FWN-1	A3FWN-2
R	New Process 541-GD	K*2-P-400	A3LHWN-1	A3LHWN-2
R or L	Spicer (Spur)	K*2-P-406	A3MWN-1	A3MWN-2
R	Spicer 5000	K*2-P-393	A3UHWN-1	A3UHWN-2

* KB—13/16" Optional Shaft, KC—7/8" Standard Shaft, KE—1" Optional Shaft.

Example: KB2-P-403 will have a 13/16" Output Shaft.

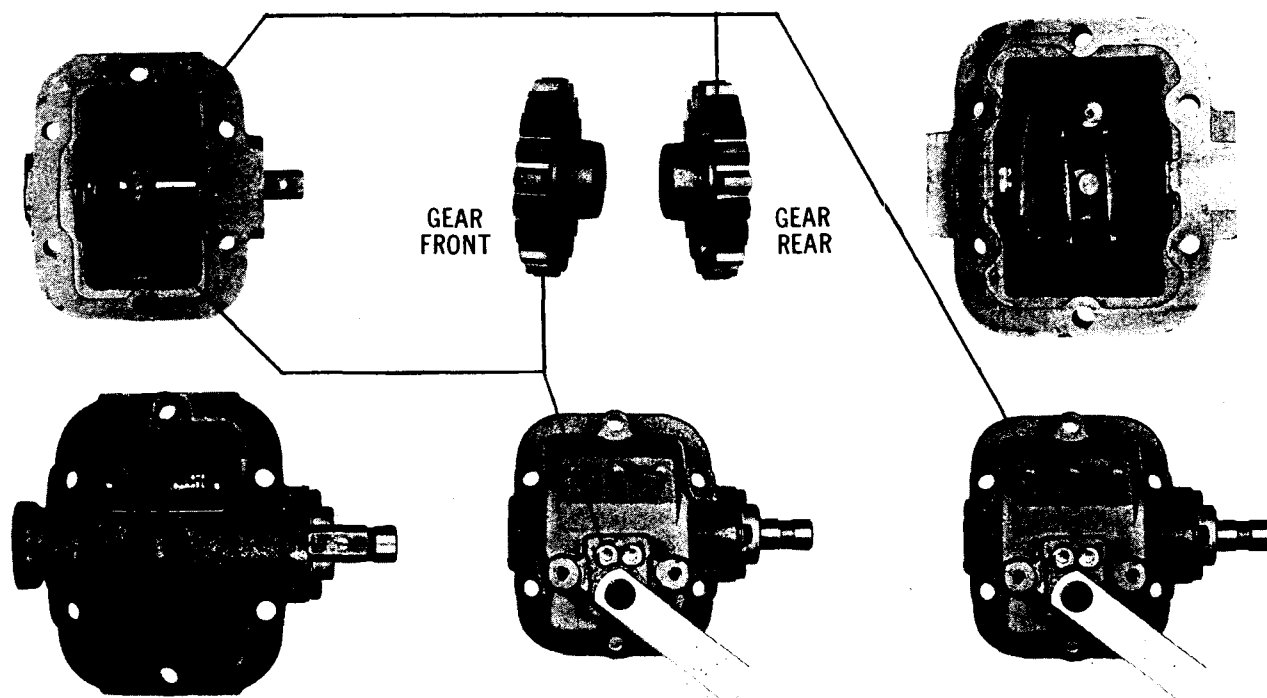


Fig. 1

HOW TO ASSEMBLE

1. Determine model required and select correct gear and shaft kit.
2. Place gear in housing with the gear hub extending to the opposite side of the gear position you require. See above.
3. Insert shaft.



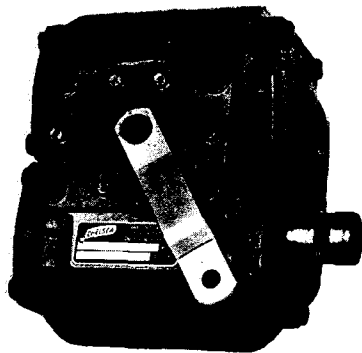
4. Place two gaskets, thrust plate, one gasket, bearing cap on housing. Insert capscrew and tighten.
5. Put key in shaft.
6. Attach name plate. If model is lever control, strike (W) from name plate.

To change shifter in Wire Control Housing to Gear Front or Gear Rear Position, refer to Figure No. 1.

1. Remove shifter lever and wire control bracket. Remove poppet spring and plunger and replace to desired arrangement. NOTE: poppet spring is always the same side as the gear.
2. Replace shifter lever and wire control bracket to desired arrangement. (Refer to Figure No. 1).

REDUCE P.T.O. INVENTORIES WITH POWER TAKE OFF KITS

*in 4 minutes time you can
assemble any one of the P.T.O.'s
shown to fit 95% of all trucks with 31 different
gears and 4 basic housing assemblies*



HEAVY DUTY

*1 speed forward, 1 speed reverse
S35 thru S37 series P.T.O.'s*

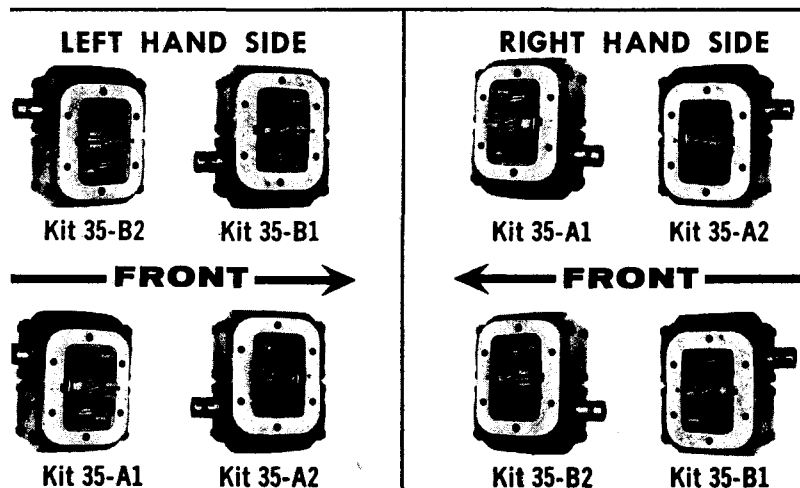
features

- Heavy duty taper roller bearings throughout
- Extra wide gears — $\frac{3}{4}$ -inch face width
- Torque lock shaft prevents gear creeping
- E-Z Shift, wire or "Y" lever control

advantages

- Lower P.T.O. inventory
- Higher stock turnover
- No lost sales due to increased coverage
- Complete interchangeability of parts

Housing Kit Assembly Arrangement



STANDARD OUTPUT SHAFT SIZE, 1 $\frac{1}{4}$ "

For lever or rod control order "Y" type shifting control.

Example: Kit 35-B2 (Wire Control)
Kit 35Y-B2 (Lever Control)
Kit D35-B2 (Deep Mount)

CUSTOM DESIGNED
and
MANUFACTURED

REVERSIBLE SERIES APPLICATION CHART

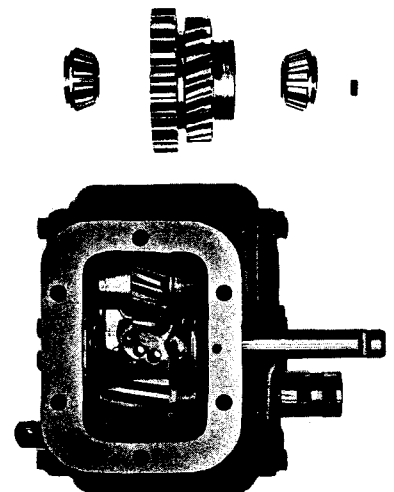
Side	Transmission Make & Model	Pitch	Pressure Angle	Input Gear	No. of Teeth	Model Number
R	Warner T9, T97 (Spur)	7	22½°	5-P-205	27T	S35
R	435 New Process (Helix)	8.1160	20°	5-P-272	25T	S35AR
R	435 New Process (Helix) w/adapter	8.1160	20°	5-P-310	25T	S35BR
R	Warner T98 (RH Helix)	8.0829	20°	5-P-206	26T	S35C
R	420 New Process (Helix)	7.6168	18°29'22"	5-P-208	26T	S35CD
R	Clark 300V & 380V Series and 420 New Process w/adapter	7.6168	18°29'22"	5-P-345	26T	S35CDR
R	Warner T98A (LH Helix)	8.0829	20°	5-P-207	26T	S35CF
L	T-18A & T-18B (LH Helix)	8.0829	20°	5-P-363	27T	SD35CG
R	Fuller R-35 (Helix)	6.928	17½°	5-P-413	23T	S35FR
R	New Process (Helix)	8.2559	20°	5-P-332	26T	S35GD
R	Spicer 6000 Series (Helix)	6	17½°	5-P-216	21T	S35HP
L	New Process 205 (LH Helix)	7	20°	5-P-449	22T	S35KH
R	541 New Process (Helix)	6	20°	5-P-219	22T	S35P
R	540 New Process (Helix)	7.1952	16°53'01"	5-P-218	22T	S35R
R	Clark 400V (Helix)	6.5199	18°31'5"	5-P-417	23T	S35T
R	Spicer 5000 (Helix)	7	17°30'	5-P-419	24T	S35UH
L	Chevrolet 4-Speed (Spur)	7	20°	5-P-210	27T	S36
L	Chevrolet 4-Speed (Helix)	7	20°	5-P-211	25T	S36A
L	Spicer 3152 (RH Helix)	7	20°	5-P-212	25T	S36B
R or L	Chevrolet 465	7.3449	20°	5-P-359	25T	S36MH
R or L	Chevrolet 465 w/adapter	7.3449	20°	5-P-360	26T	S36MHR
R or L	Universal 5-Pitch (Spur)	5	20°	5-P-213	19T	S37C
R or L	Universal 6-Pitch (Spur)	6	20°	5-P-214	22T	S37D
L	International T-34, T-35	6.5400	18°27'54"	5-P-271	23T	S37D12
R or L	Spicer (Spur)	6	17½°	5-P-215	22T	S37D17
L	540 New Process (Spur)	6	20°	5-P-217	22T	S37D71
L	540 New Process (Spur)	6	20°	5-P-217	22T	SD37DH
R	Spicer 5831 Aux. (Helix)	6	17½°	5-P-415	21T	S37HE
R	Spicer 7041 (Helix)	6	17½°	5-P-414	21T	S37HG
R or L	Watson 3231 (Helix)	6	17½°	5-P-418	21T	S37HM
R	Spicer 3853 Series	8.0829	20°	5-P-291	27T	S37K7
R	Spicer 2650, 3152	8.0829	20°	5-P-323	27T	S37K7R

HOW TO ASSEMBLE INPUT GEAR IN DESIRED MODEL

1. Start idler shaft into housing from the set screw side. Be sure the slot in shaft is in line with the set screw hole in housing. Let shaft extend into the opening ¼ inch.
2. Place adjustment shims on shaft extending into the housing. Use the combination of shims that will just let the gear and bearings slide into place. "Push Fit" If the gear falls in freely or has to be forced into position the adjustment is incorrect and will damage the bearings.
3. Insert gears and bearing assembly into opening.
4. Drive shaft through bearings and secure set screw into slot in shaft.
5. Gear must spin freely without end play after assembly.

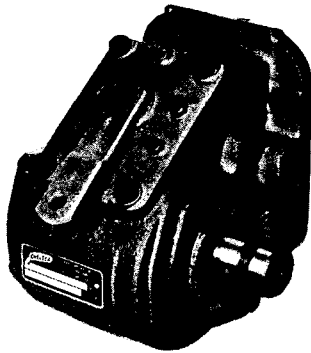
COLOR CODE FOR ADJUSTMENT SHIMS

Thickness	Color
.055	Lt. Blue
.060	Green
.065	White
.070	Red
.075	Pink



REDUCE P.T.O. INVENTORIES WITH POWER TAKE OFF KITS

*in 4 minutes time you can
assemble any one of the P.T.O.'s
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gears and 4 basic housing assemblies*



HEAVY DUTY

single speed 2 gear

S380 thru S400 series P.T.O.'s

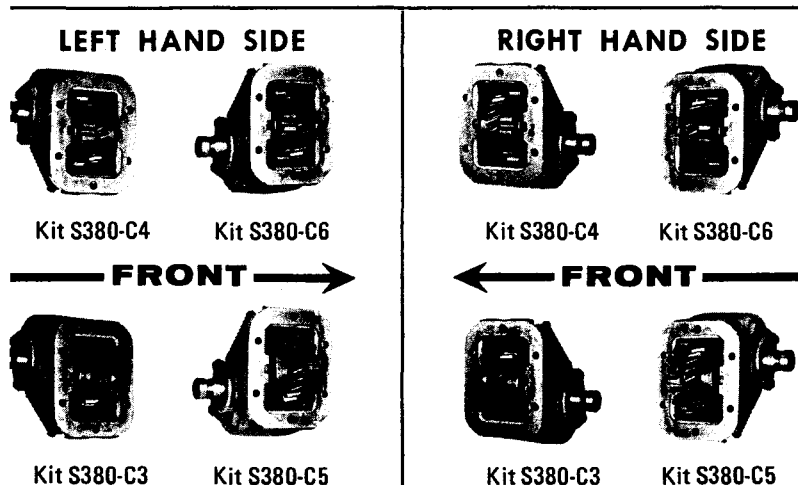
features

- Heavy duty taper roller bearings throughout
- Extra wide gears — $\frac{3}{4}$ -inch face width
- E-Z Shift, wire or "Y" lever control

advantages

- Lower P.T.O. inventory
- Higher stock turnover
- No lost sales due to increased coverage
- Complete interchangeability of parts

Housing Kit Assembly Arrangement



STANDARD OUTPUT SHAFT SIZE, $1\frac{1}{4}$ "

For lever or rod control order "Y" type shifting control.

Example: Kit S380-C6 (Wire Control)
Kit S380Y-C6 (Lever Control)
Kit DS380-C6 (Deep Mount)

**CHELSEA PTO'S AND GEAR BOXES
ARE DESIGNED AND MANUFACTURED
TO MEET YOUR
SPECIFIC REQUIREMENTS**

SINGLE SPEED TWO GEAR APPLICATION CHART

Side	Transmission Make & Model	Pitch	Pressure Angle	Input Gear	No. of Teeth	Model Number
R	Warner T9, T97 (Spur)	7	22½°	5-P-205	27T	S380
R	435 New Process (Helix)	8.1160	20°	5-P-272	25T	S380AR
R	Warner T98 (RH Helix)	8.0829	20°	5-P-206	26T	S380C
R	420 New Process (Helix)	7.6168	18°29'22"	5-P-208	26T	S380CD
R	Clark 300V & 380V Series & 420 New Process w/adaptor	7.6168	18°29'22"	5-P-345	26T	S380CD R
R	Warner T98A (LH Helix)	8.0829	20°	5-P-207	26T	S380CF
L	T-18A & T-18B (LH Helix)	8.0829	20°	5-P-363	27T	S380CG
R	Fuller R-35 (Helix)	6.928	17½°	5-P-413	23T	S380FR
R	New Process (Helix)	8.2559	20°	5-P-447	26T	S380GD
R	Spicer 7041 (Helix)	6	17½°	5-P-414	21T	S380HG
R	Spicer 6000 Series (Helix)	6	17½°	5-P-216	21T	S380HP
L	New Process 205 (Helix)	7	20°	5-P-449	23T	S380KH
R	541 New Process (LH Helix)	6	20°	5-P-219	22T	S380P
R	540 New Process (Helix)	7.1592	16°53'01"	5-P-218	22T	S380R
R	Clark 400V (Helix)	6.5199	18°31'5"	5-P-417	23T	S380T
R	Spicer 5000 (Helix)	7	17½°	5-P-419	24T	S380UH
L	Chevrolet 4-Speed (Spur)	7	20°	5-P-210	27T	S390
L	Chevrolet 4-Speed (Helix)	7	20°	5-P-211	25T	S390A
L	Spicer 3152 (RH Helix)	7	20°	5-P-212	25T	S390B
R or L	Chevrolet 465	7.3449	20°	5-P-359	25T	S390MH
R or L	Chevrolet 465 w/adaptor	7.3449	20°	5-P-360	26T	S390MHR
R or L	Universal 5-Pitch (Spur)	5	20°	5-P-213	19T	S400C
R or L	Universal 6-Pitch (Spur)	6	20°	5-P-214	22T	S400D
L	International T-34, T-35	6.5400	18°27'54"	5-P-271	23T	S400D12
R or L	Spicer (Spur)	6	17½°	5-P-215	22T	S400D17
L	540 New Process (Spur)	6	20°	5-P-217	22T	S400DH
R	Spicer 5831 Aux. (Helix)	6	17½°	5-P-415	21T	S400HE
R	Spicer 3853 Series	8.0829	20°	5-P-291	27T	S400K7
R	Spicer 2650, 3152	8.0829	20°	5-P-323	27T	S400K7R

HOW TO ASSEMBLE INPUT GEAR IN DESIRED MODEL

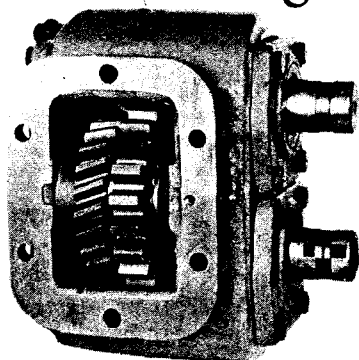
1. Start idler shaft into housing from the set screw side. Be sure the slot in shaft is in line with the set screw hole in housing. Let shaft extend into the opening ¼ inch.
2. Place adjustment shims on shaft extending into the housing. Use the combination of shims that will just let the gear and bearings slide into place. "Push Fit" If the gear falls in freely or has to be forced into position the adjustment is incorrect and will damage the bearings.
3. Insert gears and bearing assembly into opening.
4. Drive shaft through bearings and secure set screw into slot in shaft.
5. Gear must spin freely without end play after assembly.

COLOR CODE FOR ADJUSTMENT SHIMS

Thickness	Color
.055	Lt. Blue
.060	Green
.065	White
.070	Red
.075	Pink

REDUCE P.T.O. INVENTORIES WITH POWER TAKE OFF KITS

*in 4 minutes time you can
assemble any one of the P.T.O.'s
shown to fit 95% of all trucks with 27 different
gears and 2 basic housing assemblies*



HEAVY DUTY

*dual shaft
S45 thru S47 series*

features

- Heavy duty taper roller bearings throughout
- Extra wide gears — $\frac{3}{4}$ -inch face width
- Torque lock shaft prevents gear creeping

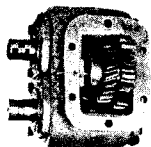
advantages

- Lower P.T.O. inventory
- Higher stock turnover
- No lost sales due to increased coverage
- Complete interchangeability of parts

STANDARD OUTPUT SHAFT SIZE, 1 $\frac{1}{4}$ "

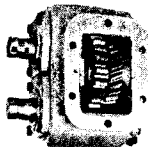
Housing Kit Assembly Arrangement

LEFT HAND SIDE



Kit 45-A1

Kit D45-A1

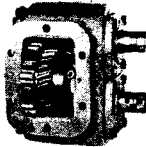


Kit 45-A2

Kit D45-A2

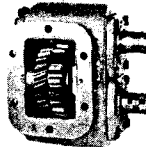
— FRONT —

RIGHT HAND SIDE



Kit 45-A1

Kit D45-A1



Kit 45-A2

Kit D45-A2

— FRONT —

FINE ENGINEERING

AND

PRODUCTION SKILLS

CHELSEA PTO'S AND GEAR BOXES ARE DESIGNED AND MANUFACTURED TO MEET YOUR SPECIFIC REQUIREMENTS

DUAL SHAFT SERIES APPLICATION CHART

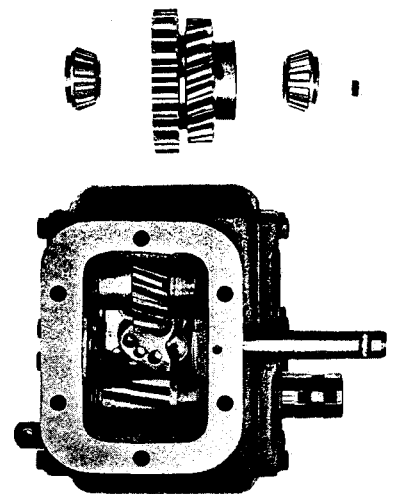
Side	Transmission Make & Model	Pitch	Pressure Angle	Input Gear	No. of Teeth	Model Number
R	Warner T9, T97 (Spur)	7	22½°	5-P-205	27T	S45
R	435 New Process (Helix)	8.1160	20°	5-P-272	25T	S45AR
R	435 New Process w/adapter	8.1160	20°	5-P-310	25T	S45BR
R	Warner T98 (RH Helix)	8.0829	20°	5-P-206	26T	S45C
R	420 New Process (Helix)	7.6168	18°29'22"	5-P-208	26T	S45CD
R	Clark 300V & 380V Series & 420 New Process w/adapter	7.6168	18°29'22"	5-P-345	26T	S45CDR
R	Warner T98A (LH Helix)	8.0829	20°	5-P-207	26T	S45CF
L	T-18A & T-18B (LH Helix)	8.0829	20°	5-P-363	27T	SD45CG
R	New Process (Helix)	8.2559	20°	5-P-332	26T	S45GD
R	Spicer 6000 Series (Helix)	6	17°30'	5-P-216	21T	S45HP
L	New Process 205 (LH Helix)	7	20°	5-P-449	23T	S45KH
R	541 New Process (Helix)	6	20°	5-P-219	22T	S45P
R	540 New Process (Helix)	7.1592	16°15'01"	5-P-218	22T	S45R
R	Spicer 5000 (Helix)	7	17°30'	5-P-419	24T	S45UH
L	Chevrolet 4-Speed (Spur)	7	20°	5-P-210	27T	S46
L	Chevrolet 4-Speed (Helix)	7	20°	5-P-211	26T	S46A
L	Spicer 3152 (RH Helix)	7	20°	5-P-212	25T	S46B
R or L	Chevrolet 465	7.3449	20°	5-P-359	25T	S46MH
R or L	Chevrolet 465 w/adapter	7.3449	20°	5-P-360	26T	S46MHR
R or L	Universal 5-Pitch (Spur)	5	20°	5-P-213	19T	S47C
R or L	Universal 6-Pitch (Spur)	6	20°	5-P-214	22T	S47D
R or L	Spicer (Spur)	6	17°30'	5-P-215	22T	S47D17
L	540 New Process (Spur)	6	20°	5-P-217	22T	S47D71
L	540 New Process (Spur)	6	20°	5-P-217	22T	SD47DH
L	International T-34 & T-35	6.5400	18°27'54"	5-P-271	23T	S47D12
R	Spicer 7041 (Helix)	6	17°30'	5-P-414	21T	S47HG
R	Spicer 3853 Series	8.0829	20°	5-P-291	27T	S47K7
R	Spicer 2650, 3152 Series	8.0829	20°	5-P-323	27T	S47K7R

HOW TO ASSEMBLE INPUT GEAR IN DESIRED MODEL

1. Start idler shaft into housing from the set screw side. Be sure the slot in shaft is in line with the set screw hole in housing. Let shaft extend into the opening ¼ inch.
2. Place adjustment shims on shaft extending into the housing. Use the combination of shims that will just let the gear and bearings slide into place. "Push Fit" If the gear falls in freely or has to be forced into position the adjustment is incorrect and will damage the bearings.
3. Insert gears and bearing assembly into opening.
4. Drive shaft through bearings and secure set screw into slot in shaft.
5. Gear must spin freely without end play after assembly.

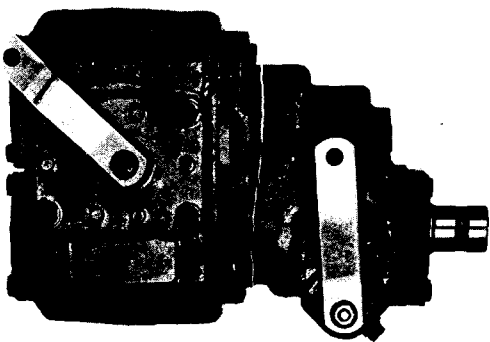
COLOR CODE FOR ADJUSTMENT SHIMS

Thickness	Color
.055	Lt. Blue
.060	Green
.065	White
.070	Red
.075	Pink



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HEAVY DUTY

*2 speeds forward, 2 speeds reverse
S55 thru S57 series P.T.O.'s*

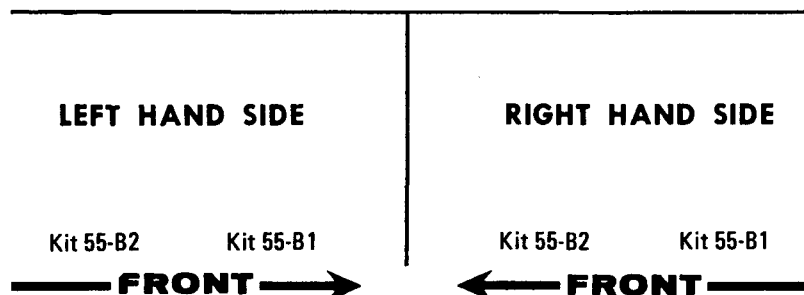
features

- Heavy duty taper roller bearings throughout
- Extra wide gears — $\frac{3}{4}$ -inch face width
- Torque lock shaft prevents gear creeping
- E-Z Shift, wire or "Y" lever control

advantages

- Lower P.T.O. inventory
- Higher stock turnover
- No lost sales due to increased coverage
- Complete interchangeability of parts

Housing Kit Assembly Arrangement



STANDARD OUTPUT SHAFT SIZE, 1 $\frac{1}{4}$ "

For lever or rod control order "Y" type shifting control.

Example: Kit 55-B2 (Wire Control)
Kit 55Y-B2 (Lever Control)

CUSTOM DESIGNED
and
MANUFACTURED

S55-57 SERIES APPLICATION CHART

Side	Transmission Make & Model	Pitch	Pressure Angle	Input Gear	No. of Teeth	Model Number
R	Warner T9, T97 (Spur)	7	22°30'	5-P-205	27	S55
R	Warner T9, T97 (Spur)	7	22°30'	5-P-205	27	SD55
R	435 New Process (Helix)	8.1160N	20°N	5-P-272	25	S55AR
R	Warner T98 (RH Helix)	8.0829N	20°	5-P-206	26	S55C
R	420 New Process (Helix)	7.6168	18°29'22"N	5-P-208	26	S55CD
R	420 New Process (Helix)	7.6168	18°29'22"N	5-P-345	26	S55CDR
R	Warner T98A (LH Helix)	8.0829N	20°N	5-P-207	26	S55CF
R	Spicer 6000 Series (Helix)	6N	17°30'N	5-P-216	21	S55HP
L	New Process 205 (Helix)	7	20°	5-P-449	23	S55KH
R	541 New Process (LH Helix)	6N	20°N	5-P-219	22	S55P
R	540 New Process (Helix)	6N	17°30'N	5-P-218	21	S55R
R	Clark 400V (Helix)	6.5199N	18°31'05"N	5-P-417	23	S55T
R	Spicer 5000 (Helix)	7	17°30'	5-P-419	24	S55UH
L	Chevrolet 4-Speed (Spur)	7	20°	5-P-210	27	S56
L	Chevrolet 4-Speed (Helix)	7N	20°N	5-P-211	25	S56A
L	Spicer 3152 (RH Helix)	7N	20°	5-P-212	25	S56B
R or L	Chevrolet 465	7.34498N	20°N	5-P-359	25	S56MH
R or L	Chevrolet 465 w/adaptor	7.34498N	20°N	5-P-360	26	S56MHR
R or L	Universal 5-Pitch (Spur)	5	20°	5-P-213	19	S57C
L	T-18A & T-18B (LH Helix)	8.0829N	20°N	5-P-363	27	SD57CG
R or L	Universal 6-Pitch (Spur)	6	20°	5-P-214	23	S57D
R or L	Universal 6-Pitch (Spur)	6	20°	5-P-214	23	SD57D
L	International T-34, T-35	6.5400N	18°27'54"N	5-P-271	23	S57D12
R or L	Spicer (Spur)	6	17°30'	5-P-215	22	S57D17
L	540 New Process (Spur)	6	20°	5-P-217	22	S57D71
R	Fuller R-35 (Helix)	6.928N	17°30'N	5-P-413	23	S57FR
R	Spicer 5831 Aux. (Helix)	6N	17°30'N	5-P-415	21	S57HE
R	Spicer 5831 Aux. (Helix)	6N	17°30'N	5-P-415	21	SD57HE
R	Spicer 7041 (Helix)	6N	17°30'N	5-P-414	21	SD57HG
R or L	Watson 3231 (Helix)	6N	17°30'N	5-P-418	21	S57HM
R or L	Watson 3231 (Helix)	6N	17°30'N	5-P-418	21	SD57HM
R	Spicer 3853 Series	8.0829N	20°N	5-P-291	27	S57K7
R	Spicer 2650, 3152 Series	8.0829N	20°N	5-P-323	27	S57K7R

HOW TO ASSEMBLE INPUT GEAR IN DESIRED MODEL

1. Start idler shaft into housing from the set screw side. Be sure the slot in shaft is in line with the set screw hole in housing. Let shaft extend into the opening $\frac{1}{16}$ inch.
2. Place adjustment shims on shaft extending into the housing. Use the combination of shims that will just let the gear and bearings slide into place. "Push Fit" If the gear falls in freely or has to be forced into position the adjustment is incorrect and will damage the bearings.
3. Insert gears and bearing assembly into opening.
4. Drive shaft through bearings and secure set screw into slot in shaft.
5. Gear must spin freely without end play after assembly.

COLOR CODE FOR ADJUSTMENT SHIMS

Thickness	Color
.055	Lt. Blue
.060	Green
.065	White
.070	Red
.075	Pink

NOTE: Model S95-97 Series same as S55-57 Series less reverse speeds.

PTO APPLICATIONS FOR HOLLEY AUXILIARY GOVERNOR DRIVE

For Converting Present PTO Models to Holley Governor Drive

CHELSEA P.T.O. MODEL	OUTPUT SHAFT DIAMETER	CONVERSION KIT NO.
-------------------------	--------------------------	-----------------------

SINGLE SPEED

41 Series	1 1/4"	328071X
41K Series	1 1/4"	328071X
S380 Series	1 1/4"	328541X
A22L Series	1 1/4"	328071X
42 Series	1 1/4"	328240X

SPLIT SHAFT

4600	1 1/2" - 10 Spline	328502X
4607	1 3/8" Pulley	328087X
4606	Direct Mtd. Pump	328088X
4609	Direct Mtd. Pump	328088X

8 BOLT

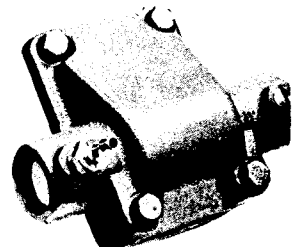
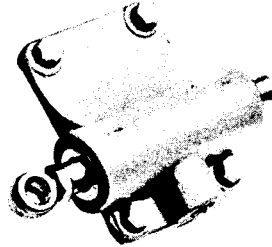
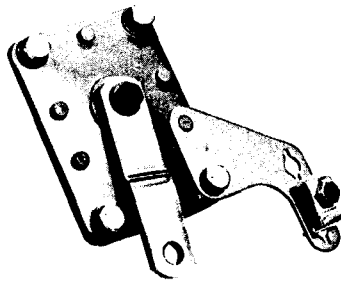
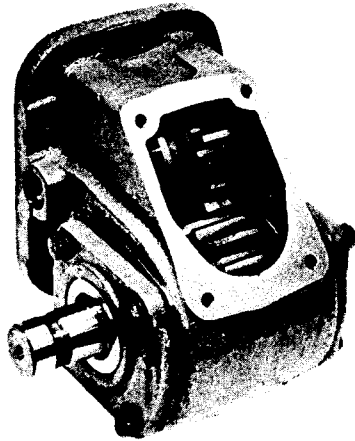
820 Series	1 1/2" - 10 Spline	328238-5X
830 Series	1 1/2" - 10 Spline	328238-9X
840 Series	1 1/2" - 10 Spline	328238-12X

WHEN ORDERING NEW P.T.O.'S WHICH REQUIRE HOLLEY
AUXILIARY GOVERNOR DRIVE ADD "H" TO PART NUMBER

EXAMPLE:

41K Assembly - C4 becomes H41K Assembly - C4

INTERCHANGEABLE



MODEL SERIES	ASSEMBLY ARRANGEMENTS	COVER ASSEMBLIES			FIELD CONVERSION KITS		
		Wire Control	Lever Control	HYDRAULIC	Air Shift	Vac-U-Matic	HYDRAULIC
15HFT	—	328004X	328495X	—	—	—	—
A22L	C3 & C6	328148X	328312X	328658X	328390-9X	328390-10X	328640X
A22L	C4 & C5	328149X	328312X	328658X	328390-9X	328390-10X	328640X
S380-400	C3 & C6	328129X	328650X	328654X	328390-5X	328390-7X	328639-1X
S380-400	C4 & C5	328130X	328650X	328655X	328390-6X	328390-8X	328639-2X
41D	C3 & C6	328296-1X	328260X	328656X	328390-1X	328390-3X	328642-1X
41D	C4 & C5	328296-2X	328260X	328657X	328390-2X	328390-4X	328642-2X
41K	C3 & C6	328296-1X	328260X	328656X	328290-1X	328390-3X	328642-1X
41K	C4 & C5	328296-2X	328260X	328657X	328390-2X	328390-4X	328642-2X
41X	C3 & C6	328296-1X	328260X	328656X	328390-1X	328390-3X	328642-1X
41X	C4 & C5	328296-2X	328260X	328657X	328390-2X	328390-4X	328642-2X
42L	C3 & C6	328290-1X	328653X	328654X	328390-5X	328390-7X	328639-1X
42L	C4 & C5	328290-2X	328653X	328655X	328390-6X	328390-8X	328639-2X
43	C3 & C6	328200X	—	—	—	—	—
43	C4 & C5	328201X	—	—	—	—	—
S35-37	A1 & A2	328014X	328420X	—	—	—	—
S35-37	B1 & B2	328013X	328420X	—	—	—	—
SR35-37	All "A"	328014X	328420X	—	—	—	—
SR35-37	All "B"	328013X	328420X	—	—	—	—
S55-57	A1 & A2	328014X	328420X	—	—	—	—
S55-57	B1 & B2	328013X	328420X	—	—	—	—

P.T.O.'S For Use With DIRECT MOUNTING PUMPS

In selecting a Power Take-Off for use with a direct mounting pump, the rotation, horsepower, and speed requirement of the pump should be checked against the ratings of the P.T.O.

P.T.O. Model	TYPE & GEARS	TORQUE RATING INTERMITTENT SERVICE	HP RATING @1000 RPM OF OUTPUT SHAFT
Heavy Duty			
2642	Crankshaft Drive	200 lbs. ft.	54% Enginewise
2740	Crankshaft Drive	140 lbs. ft.	75% Enginewise
41D	Medium Speed-Two Gear	125 lbs. ft.	23
41K	High Speed-Two Gear	110 lbs. ft.	21
3380	One Speed-Two Gear	140 lbs. ft.	25
42	Low Speed-Two Gear	200 lbs. ft.	38
43D	Med. Speed-Two Gear	180 lbs. ft.	34
43K	High Speed-Two Gear	160 lbs. ft.	30
Extra Heavy Duty			
A22L	Low Speed-Two Gear	240 lbs. ft.	45
A22D	High Speed-Two Gear	210 lbs. ft.	40
A23D	Medium High Speed-Two Gear	225 lbs. ft.	42
A22LL	Extra Low Speed-Two Gear	240 lbs. ft.	45
26DD	One Low Speed-Two Gear	250 lbs. ft.	47-1/2
27	Low Speed-Power Shift	250 lbs. ft.	47-1/2

THE MOUNTING OF A PUMP WHICH HAS A WEIGHT EXCEEDING 40 LBS. IS NOT RECOMMENDED, UNLESS THE PUMP IS SUPPORTED WITH SUPPORT STRAPS OR BRACKET.

HOW TO SELECT THE P.T.O.

The SELECTION of a Power Take-Off for use with a Direct Mounting Pump must satisfy several conditions.

The Power Take-Off MUST include:

- A. The correct PITCH MODEL in order to engage the Transmission P.T.O. Driver Gear.
 1. Determine the MAKE of TRANSMISSION and APPLICATION NO. by referring to the TRANSMISSION INDEX, CHP460-A.
 2. Select the POWER TAKE-OFF (S380, 42, 41D, 41K, A22L, 26, 27, 43D or 43K SER.) which agrees with the ROTATION, SPEED (rpm) and HORSEPOWER requirements of the PUMP.
 3. Pump requiring CLOCKWISE ROTATION will require a Power Take-Off of the Engine rotation looking from the Rear of the Transmission.
- B. The Correct PUMP MOUNTING SUFFIX or KIT.
 1. Determine the MAKE and MODEL of the PUMP and locate the proper SUFFIX (49, 58A, etc.).
 2. Insert the number SUFFIX to the PITCH MODEL which REPLACES the shaft letter E, F, or G shown on P.T.O. Applications in Section P-73A.
 Example: Application 962 ...
 41DUH-C3-G becomes 41DUH-C3-49 depending on the make of pump, in this example Hydreco.
 3. IMPORTANT: Assuming there is sufficient clearance in the vehicle to accommodate both the Power Take-Off and the Direct Mounting Pump, it is necessary to compare all of the P.T.O. Pump Adapter FLANGE and SHAFT dimensions with the CORRESPONDING dimensions of the SHAFT and FLANGE of the PUMP. The mounting of a pump which has weight exceeding 40 lbs. is not recommended. Unless the pump is supported with support straps or bracket.
- C. Order the POWER TAKE-OFF (including the number SUFFIX) which best suits the requirements of the installation.

PARTS LIST ... See Catalog

Model A22L Series	CHP460-15	Model A2642	CHP460-17
Models 41D, 41K	CHP460-16	Model 26DD	CHP460-23
Model 42	CHP460-24	Model 27 Series	CHP460-26

13T, INVOLUTE SPLINE DATA

PITCH	16-32	PITCH DIA.	.8125
PRESS ANGLE	30°	BASE DIA.	.7036
NO. TEETH	13	PIN DIA.	.1080
ARC SPACE @ P.D.	.0997-.1010	M. BETWEEN PINS	.6507-.6537

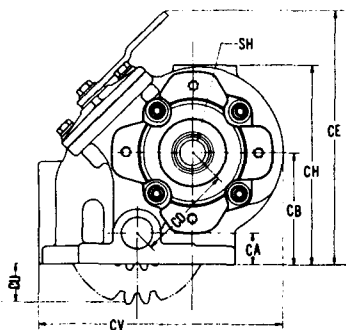
POWER TAKE-OFFS For Use With DIRECT MOUNTING HYDRAULIC PUMPS

P.T.O. CASE DIMENSIONS

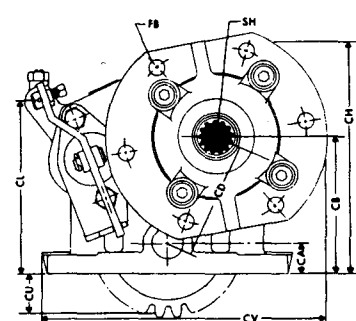
Basic Model	P.T.O. Case	CA	CB	CD	CH	CL	CU	CV
41D	1-P-178	.792"	3.669"	3.317"	6-3/16"	4.580"	1.110"	7-5/8"
D41D	1-P-187	.572"	3.449"	3.317"	5-31/32"	4.360"	1.330"	7-5/8"
41K	1-P-178	.792"	3.603"	3.087"	6-3/16"	4.580"	1.110"	7-5/8"
D41K	1-P-187	.572"	3.383"	3.087"	5-31/32"	4.360"	1.330"	7-5/8"
S380	1-P-195	.792"	3.601"	3.087"	6-3/32"	4.580"	1.110"	7-1/4"
DS380	1-P-196	.572"	3.381"	3.087"	6-3/32"	4.360"	1.330"	7-1/4"
42	1-P-195	.792"	3.601"	3.087"	6-3/16"	4.562"	1.110"	7-1/4"
D42	1-P-196	.572"	3.381"	3.087"	5-63/64"	4.375"	1.330"	7-1/4"

Basic Model	P.T.O. Case	CA	CB	CD	Ce	CH	CU	CV
A22L	1-P-166	.792"	3.516"	3.087"	8"	6-9/32"	1.110"	7-3/4"
DA22L	1-P-168	.752"	3.296"	3.087"	7-25/32"	6-1/16"	1.330"	7-3/4"
26DD	1-P-281	.972"	3.320"	3.562"	7-1/2"	7-5/8"	1.110"	6-7/16"
27 SER.	1-P-319	.972"	3.320"	3.562"	—	7-35/64"	—	7-1/2"
43D	1-P-283	.792"	2.877"	3.317"	7-1/4"	6-1/4"	1.120	7-1/4"
D43D	1-P-284	.572"	2.877"	3.317"	7-1/32"	6-1/32"	1.340	7-1/4"
43K	1-P-283	.792"	2.811"	3.087"	7-1/4"	6-1/4"	1.120	7-1/4"
D43K	1-P-284	.572"	2.811"	3.087"	7-1/32"	6-1/32"	1.340"	7-1/4"

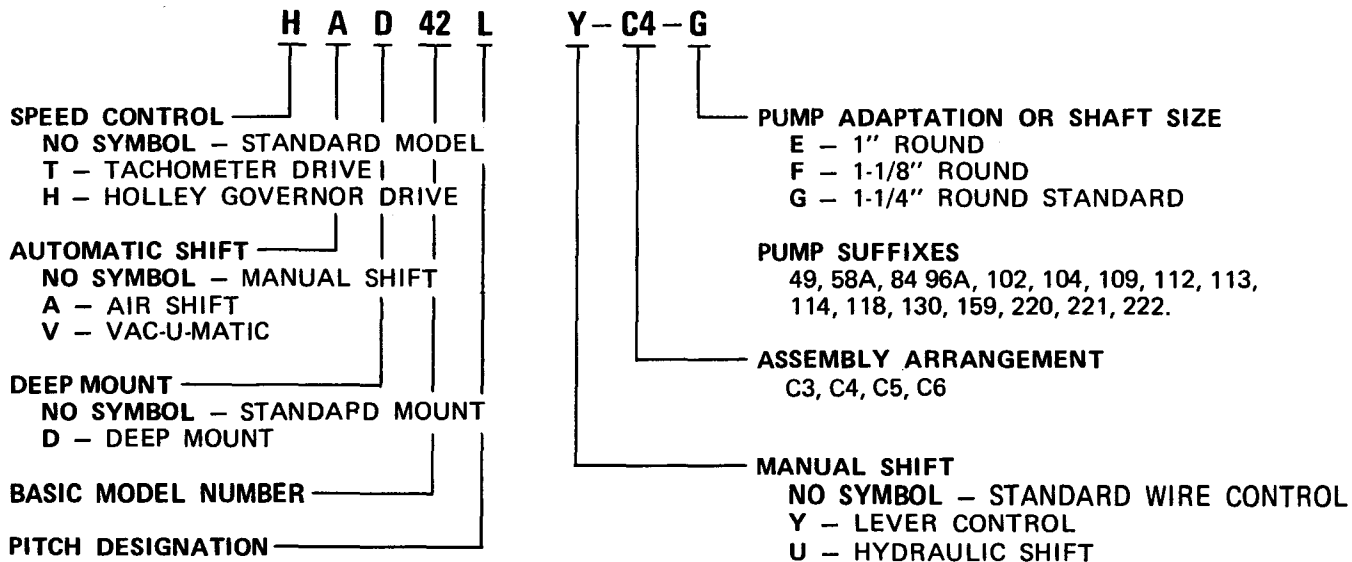
A22L
A22D
A23D
A22LL



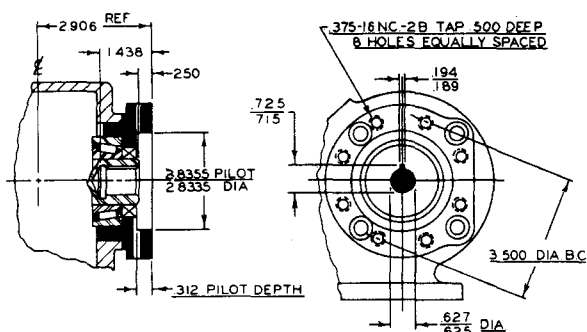
41D
41K
S380
42L



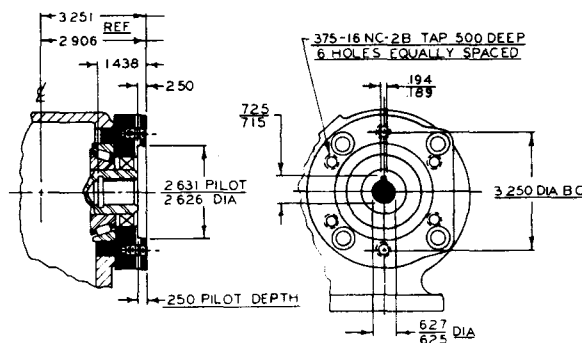
SAMPLE MODEL NUMBER CONSTRUCTION



POWER TAKE-OFFS For Use With DIRECT MOUNTING HYDRAULIC PUMPS



SUFFIX 45A



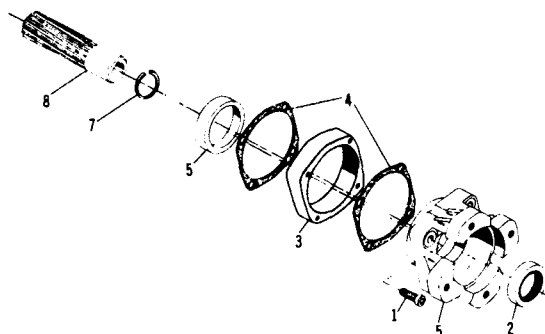
SUFFIX 49

Pump Mounting Suffix	Basic Model	Pump Flange Assembly Item No. 5	Bearing Cone Item No. 6	Output Shaft Item No. 8	Spacer 11/32" Thick Item No. 3	Lockring Item No. 7	Capscrew & Dimensions Quantity Required - Four Item No. 1	Conversion Kit Consists of Items 1 thru 8
45A	41D, 41K	328579X	550397	3-P-285	—	378391	378447-6 (5/16"-18 x 1")	328591-1X
	A22L	"	"	"	—	"	"	"
	26DD	"	"	"	—	"	"	"
	S380	"	"	"	—	"	"	"
	2740	"	"	"	—	"	"	"
Pump Mounting Suffix	Basic Model	Pump Flange Assembly Item No. 5	Bearing Cone Item No. 6	Output Shaft Item No. 8	Spacer 11/32" Thick Item No. 3	Lockring Item No. 7	Capscrew & Dimensions Quantity Required - Four Item No. 1	Conversion Kit Consists of Items 1 thru 8
49	41D, 41K	328578X	550397	3-P-285	—	378391	378447-6 (5/16"-18 x 1")	328591-2X
	A22L	"	"	"	—	"	"	"
	26DD	"	"	"	—	"	"	"
	S380	"	"	"	—	"	"	"
	2740	"	"	"	—	"	"	"
	42, 2642 43 SER.	328578X	550397	3-P-451	378336	*378391	378447-7 (5/16"-18 x 1-1/4")	328593-1X

*Quantity required, two.

Suffix 45A	Pump Make & Model	Suffix 49	Pump Make & Model
BARNES GC-2985-A-RA-4		HYDRECO 1500 A7 B**Series 1500 D1** Series	

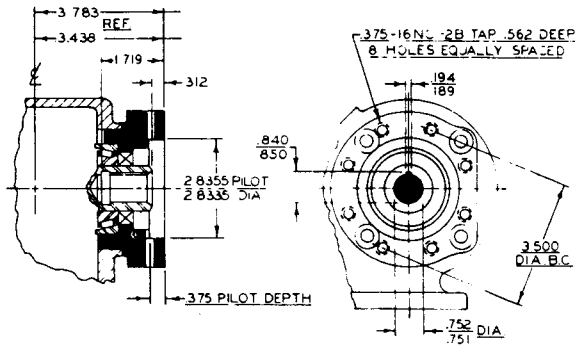
**Conversion Kits
Consist of Items
1 thru 8
Illustration**



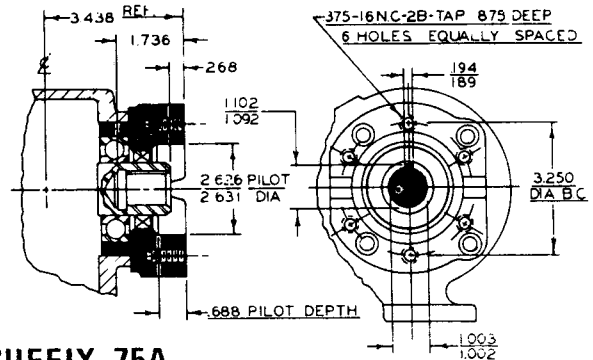
Item 6 (Bearing Cone) Not Supplied In Kit.

To convert a Conventional P.T.O. to a Hydraulic Pump Mount P.T.O., order Pump Conversion Kit shown above for respective P.T.O.'s. Oil Seal 28-P-52 (Item 2) & Gaskets 22-P-24-1 & 22-P-24-2 (Item 4) are included in all kits.

POWER TAKE-OFFS For Use With DIRECT MOUNTING HYDRAULIC PUMPS



SUFFIX 58A



SUFFIX 75A

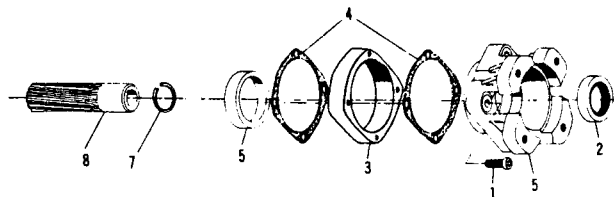
Pump Mounting Suffix	Basic Model	Pump Flange Assembly Item No. 5	Bearing Cone Item No. 6	Output Shaft Item No. 8	Spacer 11/32" Thick Item No. 3	Lockring Item No. 7	Capscrew & Dimensions Quantity Required - Four Item No. 1	Conversion Kit Consists of Items 1 thru 8
58A	41D, 41K	328582X	550397	3-P-284	—	378391	378447-7 (5/16"-18 x 1-1/4")	328591-3X
	A22L	"	"	"	—	"	"	"
	26DD	"	"	"	—	"	"	"
	S380	"	"	"	—	"	"	"
	2740	"	"	"	—	"	"	"
	42, 2642 43 SER.	328582X	550397	3-P-385	378336	*378391	378447-8 (5/16"-18 x 1-1/2")	328593-2X

*Quantity required, two.

Pump Mounting Suffix	Basic Model	Pump Flange Assembly Item No. 5	Bearing Cone Item No. 6	Output Shaft Item No. 8	Spacer 11/32" Thick Item No. 3	Lockring Item No. 7	Capscrew & Dimensions Quantity Required - Four Item No. 1	Conversion Kit Consists of Items 1 thru 8
75A	41D, 41K	21-P-107	{ 550697 } { 550698 }	3-P-308		378237	378447-7 (5/16"-18 x 1-1/4")	▲ 328591-4X
	A22L	"	"	"		"	"	"
	26DD	"	"	"		"	"	"
	S380	"	"	"		"	"	"

Suffix 58A	Pump Make & Model	Suffix 75A	Pump Make & Model
COMMERCIAL		HYDRECO	
P 15H 110**-17	PD221-**-23	2000 F2 B2 Series	
P 15H 210**-17	PD231-**-23	2000 F2 C2 Series	
P 15H 310**-17	PD321-**-23	2000 A5 E** Series	
PD121-**-23	PD321-**-23	2000 A9 E** Series	
PD131-**-23	PD369*B*-23 Series		

Conversion Kits
Consist of Items
1 thru 8
Illustration

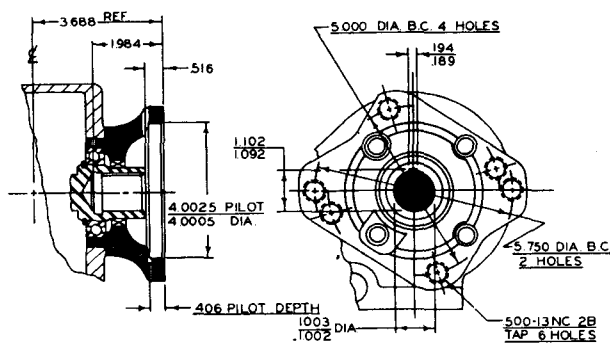


Item 6 (Bearing Cone) Not Supplied In Kit.

▲—Ball Bearing Type — To convert a Conventional P.T.O. to a Hydraulic Pump Mount P.T.O., order all parts shown plus Bearing Cap 21-P-287 closed end, Spacer 4-P-65, Seal 28-P-54, Ball Bearings 550697, 550698 & Gaskets 22-P-24-1, 22-P-24-2, Suffixes 75A, 75B, 75C, 223, 224 are not interchangeable with roller bearing type pump shaft & flanges.

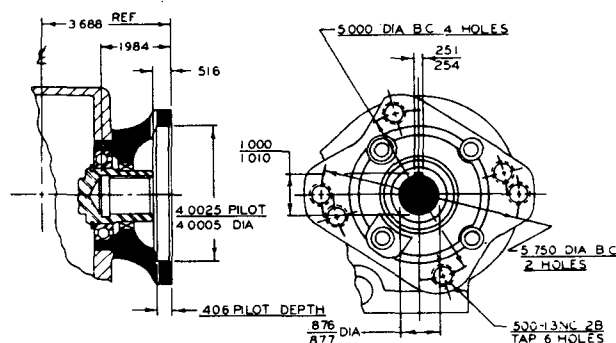
To convert a Conventional P.T.O. to a Hydraulic Pump Mount P.T.O., order Pump Conversion Kit for respective P.T.O.'s. Oil Seal 28-P-52 (Item 2) & Gaskets 22-P-24-1 & 22-P-24-2 (Item 4) are included in all kits.

POWER TAKE-OFFS For Use With DIRECT MOUNTING HYDRAULIC PUMPS



SUFFIX 75B

SIMILAR TO SUFFIX 223 - ROTATED 65°.

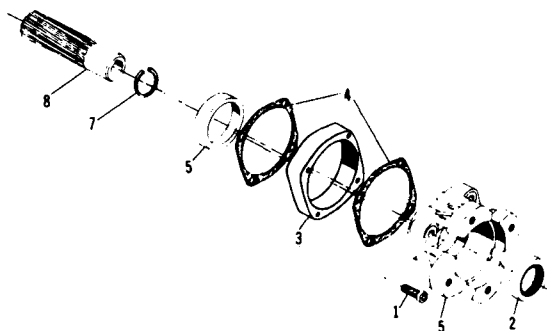


SUFFIX 75C

SIMILAR TO SUFFIX 224 - ROTATED 65°.

Pump Mounting Suffix	Basic Model	Pump Flange Assembly Item No. 5	Bearing Cone Item No. 6	Output Shaft Item No. 8	Spacer 11/32" Thick Item No. 3	Lockring Item No. 7	Capscrew & Dimensions Quantity Required - Four Item No. 1	Conversion Kit Consists of Items 1 thru 8
75B	S380	21-P-118	550697	3-P-308	—	378237	378447-8 (5/16"-18 x 1-1/2")	▲ 328591-5X
	A22L	"	550698	"	—	"	"	"
	26DD	"	"	"	—	"	"	"
	41D, 41K	"	"	"	—	"	"	"
Pump Mounting Suffix	Basic Model	Pump Flange Assembly Item No. 5	Bearing Cone Item No. 6	Output Shaft Item No. 8	Spacer 11/32" Thick Item No. 3	Lockring Item No. 7	Capscrew & Dimensions Quantity Required - Four Item No. 1	Conversion Kit Consists of Items 1 thru 8
75C	A22L	21-P-118	550697	3-P-349	—	378237	378447-8 (5/16"-18 x 1-1/2")	▲ 328591-6X
	26DD	"	550698	"	—	"	"	"
	41D, 41K	"	"	"	—	"	"	"
	S380	"	"	"	—	"	"	"
Suffix 75B Pump Make & Model		Suffix 75C Pump Make & Model						
HYDRECO		VICKERS						
2000A 2000E (With Code #5 Shaft)		PFB10 (With Opt. 1-3/4" Length Shaft)						

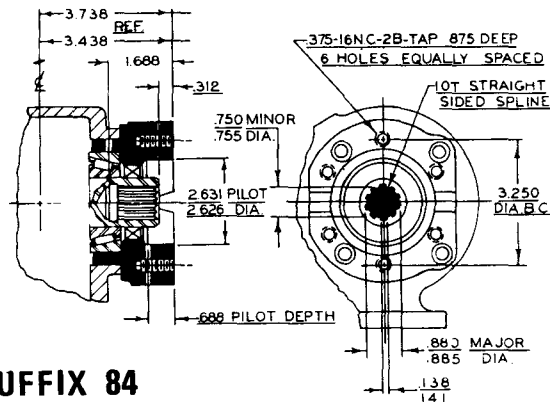
**Conversion Kits
Consist of Items
1 thru 8
Illustration**



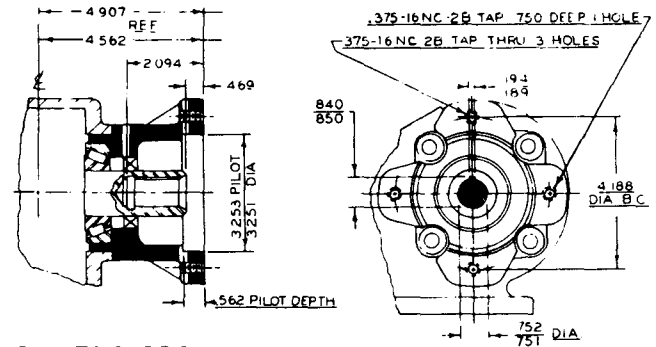
Item 6 (Bearing Cone) Not Supplied In Kit.

▲—Ball Bearing Type — To convert a Conventional P.T.O. to a Hydraulic Pump Mount P.T.O., order all parts shown plus Bearing Cap 21-P-287 closed end, Spacer 4-P-65, Seal 28-P-54, Ball Bearings 550697, 550698 & Gaskets 22-P-24-1, 22-P-24-2, Suffixes 75A, 75B, 75C, 223, 224 are not interchangeable with roller bearing type pump shaft & flanges.

POWER TAKE-OFFS For Use With DIRECT MOUNTING HYDRAULIC PUMPS



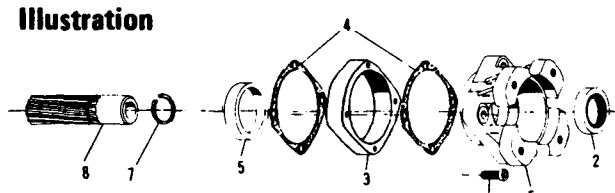
SUFFIX 84



SUFFIX 96A

Pump Mounting Suffix	Basic Model	Pump Flange Assembly Item No. 5	Bearing Cone Item No. 6	Output Shaft Item No. 8	Spacer 11/32" Thick Item No. 3	Lockring Item No. 7	Capscrew & Dimensions Quantity Required - Four Item No. 1	Conversion Kit Consists of Items 1 thru 8
84	41D, 41K	328583X	550397	3-P-404	—	378391	378447-7 (5/16"-18 x 1.250")	328591-9X
	A22L	"	"	"	—	"	"	"
	26DD	"	"	"	—	"	"	"
	S380	"	"	"	—	"	"	"
	2740	"	"	"	—	"	"	"
	42, 2642 43 SER.	328583X	550397	3-P-439	378336	378391	378447-8 (5/16"-18 x 1.500")	328593-3X
		"	"	"	"	"	"	"
Pump Mounting Suffix	Basic Model	Pump Flange Assembly Item No. 5	Bearing Cone Item No. 6	Output Shaft Item No. 8	Spacer 11/32" Thick Item No. 3	Lockring Item No. 7	Capscrew & Dimensions Quantity Required - Four Item No. 1	Conversion Kit Consists of Items 1 thru 8
96A	41D, 41K	328580X	550397	3-P-281	—	378391	378447-8 (5/16"-18 x 1-1/2")	328591-10X
	A22L	"	"	"	—	"	"	"
	26DD	"	"	"	—	"	"	"
	S380	"	"	"	—	"	"	"
	2740	"	"	"	—	"	"	"
	42, 2642 43 SER.	328580X	550397	3-P-384	378336	*378391	378447-9 (5/16"-18 x 1-3/4")	328593-4X
		"	"	"	"	"	"	"

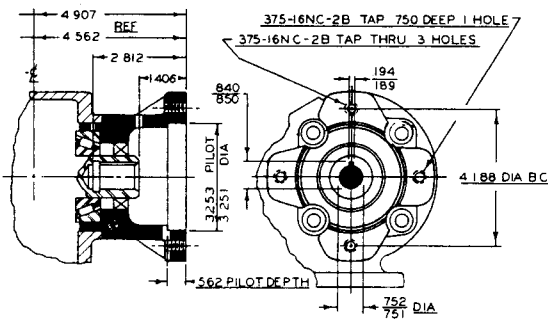
*Quantity required, two.

Suffix 84	Pump Make & Model	Suffix 96A	Pump Make & Model
Conversion Kits Consist of Items 1 thru 8 Illustration 		CESSNA	HYDRECO
		K 15300-*C*	2000 A11 B**
		K 20640-*C*	2000 A15 B**
			2115 A4 B1
		COMMERCIAL	2115 A4 B2
		P 15H-101**-.17	
		P 15H-201**-.17	DANA GEAR PUMP
		P 15H-301**-.17	0008 Series
		GRESEN	VICKERS
		TB-3-*.-R.*	V110-*.-1C-10
		thru	V210-*.-6C
		TB-12-*.-R.*	
			WEBSTER
			0, 1, 2, 3, 4 JDS
			0, 1, 2, 3, 4 YDS

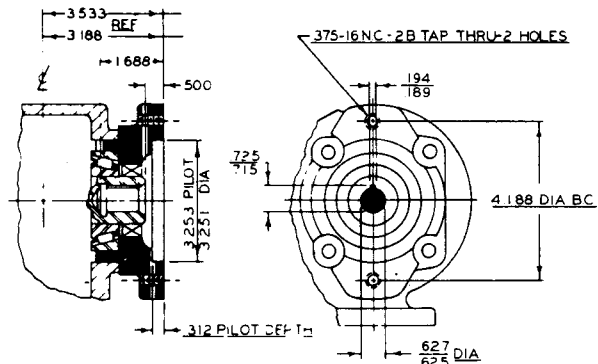
*Quantity required, two.
Item 6 (Bearing Cone) Not Supplied In Kit.

To convert a Conventional P.T.O. to a Hydraulic Pump Mount P.T.O., order Pump Conversion Kit shown above for respective P.T.O.'s. Oil Seal 28-P-52 (Item 2) & Gaskets 22-P-24-1 & 22-P-24-2 (Item 4) are included in all kits.

POWER TAKE-OFFS For Use With DIRECT MOUNTING HYDRAULIC PUMPS



SUFFIX 102

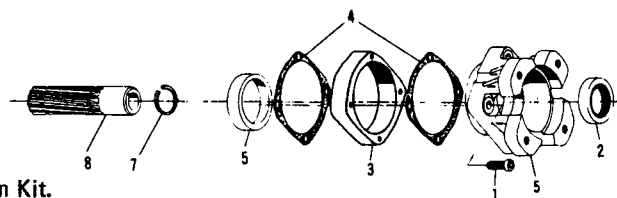


SUFFIX 104

Pump Mounting Suffix	Basic Model	Pump Flange Assembly Item No. 5	Bearing Cone Item No. 6	Output Shaft Item No. 8	Spacer 11/32" Thick Item No. 3	Lockring Item No. 7	Capscrew & Dimensions Quantity Required - Four Item No. 1	Conversion Kit Consists of Items 1 thru 8
102	41D, 41K	328580X	550397	3-P-284	—	378391	378447-8 (5/16"-18 x 1-1/2")	328591-11X
	A22L	"	"	"	—	"	"	"
	26DD	"	"	"	—	"	"	"
	S380	"	"	"	—	"	"	"
	2740	"	"	"	—	"	"	"
	42, 2642 43 SER.	328580X	550397	3-P-385	378336	*378391	378447-9 (5/16"-18 x 1-3/4")	328593-5X
Quantity required, two.								
Pump Mounting Suffix	Basic Model	Pump Flange Assembly Item No. 5	Bearing Cone Item No. 6	Output Shaft Item No. 8	Spacer 11/32" Thick Item No. 3	Lockring Item No. 7	Capscrew & Dimensions Quantity Required - Four Item No. 1	Conversion Kit Consists of Items 1 thru 8
104	41D, 41K	328581X	550397	3-P-285	—	378391	378447-6 (5/16"-18 x 1")	328591-12X
	A22L	"	"	"	—	"	"	"
	26DD	"	"	"	—	"	"	"
	S380	"	"	"	—	"	"	"
	2740	"	"	"	—	"	"	"
	42, 2642 43 SER.	328581X	550397	3-P-451	378336	*378391	378447-7 (5/16"-18 x 1-1/4")	328593-6X
Quantity required, two.								

Suffix 102	Pump Make & Model	Suffix 104	Pump Make & Model
CESSNA K15000*-B-* Series	VICKERS V 210*-1C	DANA GEAR PUMPS 0004 Series 0006 Series	
GRESEN TB-3-*-K-* thru TB-12-*-K-*	WEBSTER 0, 1, 2, 3, HCS 0, 1, 2, 3, HCSV 0, 1, 2, 3, HCM 0, 1, 2, 3, XCM 0, 1, 2, 3, 4, XCS 1, 2, 3, 4, XCSV		
DANA GEAR PUMPS 0004 Series 0006 Series			

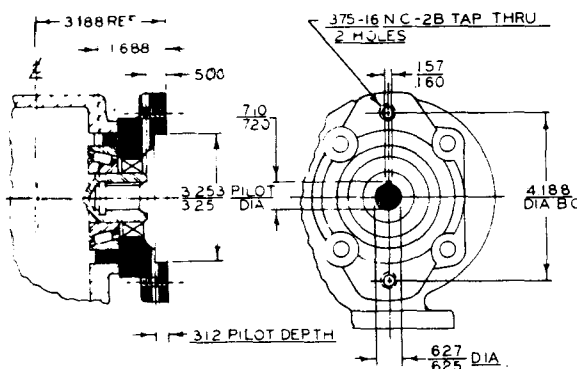
**Conversion Kits
Consist of Items
1 thru 8
Illustration**



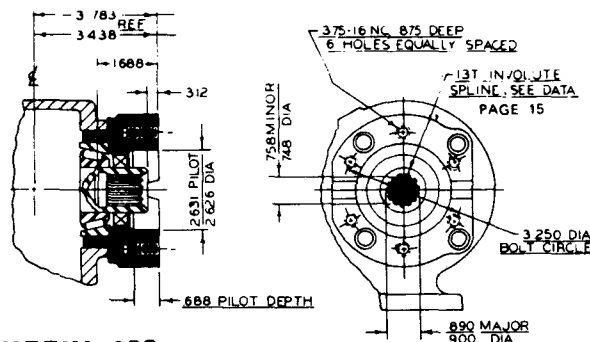
Item 6 (Bearing Cone) Not Supplied In Kit.

To convert a Conventional P.T.O. to a Hydraulic Pump Mount P.T.O., order Pump Conversion Kit shown above for respective P.T.O.'s. Oil Seal 28-P-52 (Item 2) & Gaskets 22-P-24-1 & 22-P-24-2 (Item 4) are included in all kits.

POWER TAKE-OFFS For Use With DIRECT MOUNTING HYDRAULIC PUMPS



SUFFIX 104A



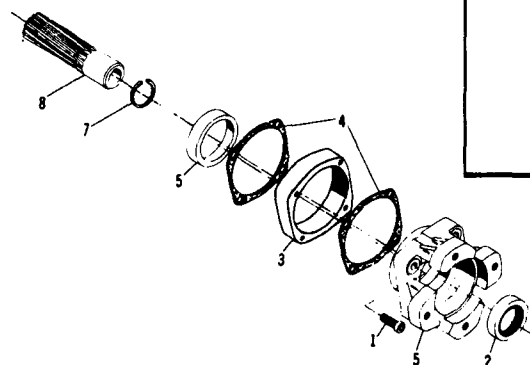
SUFFIX 109

Pump Mounting Suffix	Basic Model	Pump Flange Assembly Item No. 5	Bearing Cone Item No. 6	Output Shaft Item No. 8	Spacer 11/32" Thick Item No. 3	Lockring Item No. 7	Capscrew & Dimensions Quantity Required - Four Item No. 1	Conversion Kit Consists of Items 1 thru 8
104A	41 & A22L S380	328581X "	550397 "	3-P-405 "	"	378391 "	378447-8 (5/16"-18 x 1-1/2") "	328591-13X "
109	41D, 41K A22L 26DD S380 2740	328583X "	550397 "	3-P-282 "	"	378391 "	378447-7 (5/16"-18 x 1-1/4") "	328591-14X "
	42, 2642 43 SER.	328583X "	550397 "	3-P-351 "	378336 "	*378391 "	378447-8 (5/16"-18 x 1-1/2") "	328593-7X "

*Quantity required, two.

Suffix 104A	Pump Make & Model	Suffix 109	Pump Make & Model
VICKERS M PFB M PVB with 5/8" Dia. Shaft, 1-1/4" long.		CLARK 17 PFR2-091 COMMERCIAL P 15H-102**-16 P 15H-202**-16 P 15H-302**-16 HYDRECO 2000 A 1 E**Series 2000 A 7 E**Series	WISCONSIN SM 200 MC****

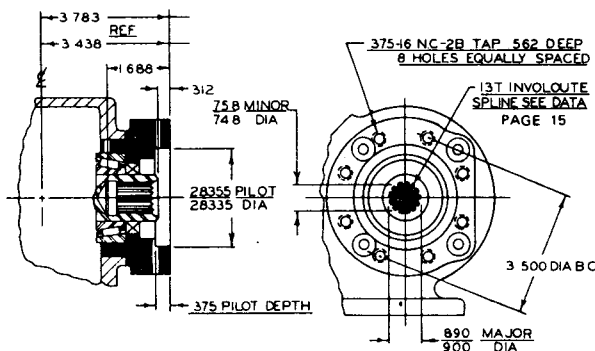
**Conversion Kits
Consist of Items
1 thru 8
Illustration**



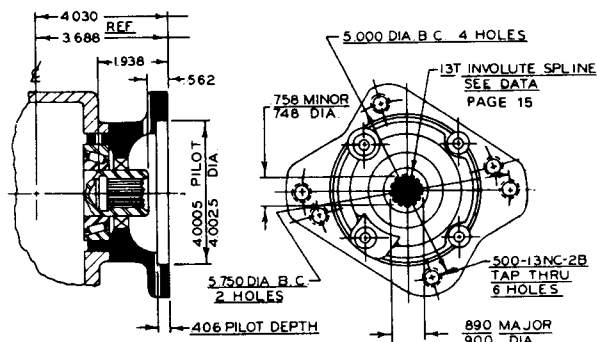
Item 6 (Bearing Cone) Not Supplied In Kit.

To convert a Conventional P.T.O. to a Hydraulic Pump Mount P.T.O., order Pump Conversion Kit shown above for respective P.T.O.'s. Oil Seal 28-P-52 (Item 2) & Gaskets 22-P-24-1 & 22-P-24-2 (Item 4) are included in all kits.

POWER TAKE-OFFS For Use With DIRECT MOUNTING HYDRAULIC PUMPS



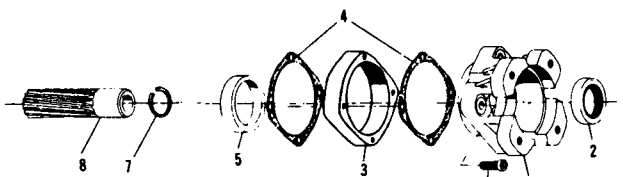
SUFFIX 112



SUFFIX 113

Pump Mounting Suffix	Basic Model	Pump Flange Assembly Item No. 5	Bearing Cone Item No. 6	Output Shaft Item No. 8	Spacer 11/32" Thick Item No. 3	Lockring Item No. 7	Capscrew & Dimensions Quantity Required - Four Item No. 1	Conversion Kit Consists of Items 1 thru 8
112	41D, 41K	328582X	550397	3-P-282	—	378391	378447-7 (5/16"-18 x 1-1/4")	328591-15X
	A22L	"	"	"	—	"	"	"
	26DD	"	"	"	—	"	"	"
	S380	"	"	"	—	"	"	"
	2740	"	"	"	—	"	"	"
	42, 2642 43 SER.	328582X	550397	3-P-351	378336	*378391	378447-8 (5/16"-18 x 1-1/2")	328593-8X
*Quantity required, two.								

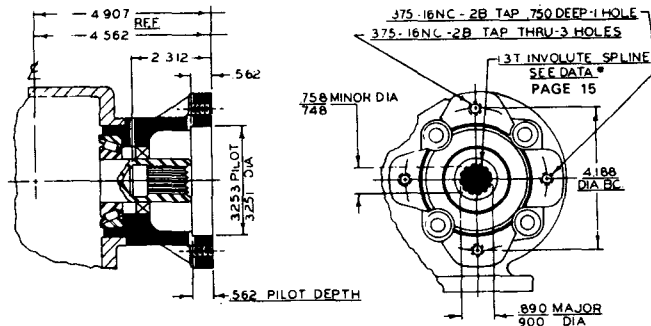
Pump Mounting Suffix	Basic Model	Pump Flange Assembly Item No. 5	Bearing Cone Item No. 6	Output Shaft Item No. 8	Spacer 11/32" Thick Item No. 3	Lockring Item No. 7	Capscrew & Dimensions Quantity Required - Four Item No. 1	Conversion Kit Consists of Items 1 thru 8
113	S380, A22L, 26, 41D, 41K	328333X	550397	3-P-282	—	378391	378447-8 (5/16"-18 x 1-1/2")	328591-16X
	27, C4-C6	21-P-303	—	3-P-678	—	—	NO FIELD CONVERSION KIT AVAILABLE FOR 27 SERIES	
	27, C3-C5	21-P-311	—	3-P-686	—	—		
	42, 2642 43 Series	328333X	550397		378336	*378391	378447-9(5/16-18-1-3/4)	328593-9X

Suffix 112	Pump Make & Model	Suffix 113	Pump Make & Model
COMMERCIAL PD 121-****-.25 thru PD 133-****-.25 P 15H-110**-16 P 15H-210**-16 P 15H-310**-16		CESSNA L20000-* -D-* Series CLARK 31 PFB 40 PFB COMMERCIAL P 15H-100**016 P 15H-107**-16 P 15H-200**-16 P 15H-207**-16 P 15H-300**-16 P 15H-307**-16 P 36H-142**-25 P 36H-197**-25 P 36H-242**-25 P 36H-297**-25 P 36H-342**-25 P 36H-397**-25	DENISON T1C-***-23 Series HYDRECO 2000 A 1 A***Series 2000 A 7 A***Series 2000 E1 A 1 A***Series 2000 E1 F***Series 2100 A 1 A***Series VICKERS 2V888-11*10 5V***-11CC10 25V**-11*10 30V**-11*10 WOOSTER P3-9-* -J1-*. * thru P3-23-* -J1-8-8 P3-9-* -S1-*. * thru P3-23-* -S1-*. *
Conversion Kits Consist of Items 1 thru 8 Illustration 			

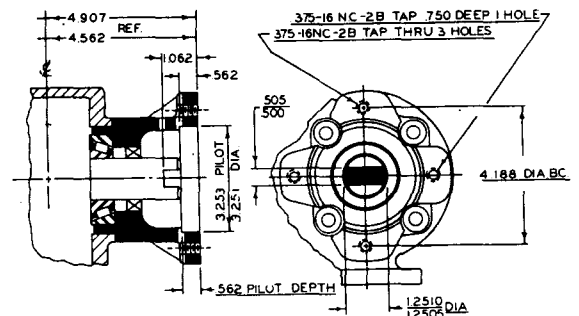
Item 6 (Bearing Cone) Not Supplied In Kit.

To convert a Conventional P.T.O. to a Hydraulic Pump Mount P.T.O., order Pump Conversion Kit shown above for respective P.T.O.'s. Oil Seal 28-P-52 (Item 2) & Gaskets 22-P-24-1 & 22-P-24-2 (Item 4) are included in all kits.

POWER TAKE-OFFS For Use With DIRECT MOUNTING HYDRAULIC PUMPS



SUFFIX 114



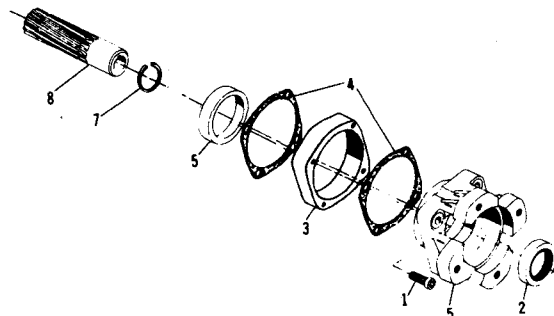
SUFFIX 118

Pump Mounting Suffix	Basic Model	Pump Flange Assembly Item No. 5	Bearing Cone Item No. 6	Output Shaft Item No. 8	Spacer 11/32" Thick Item No. 3	Lockring Item No. 7	Capscrew & Dimensions Quantity Required - Four Item No. 1	Conversion Kit Consists of Items 1 thru 8
114	41D, 41K	328580X	550397	3-P-283	—	378391	378447-8 (5/16"-18 x 1-1/2")	328591-18X
	A22L	"	"	"	—	"	"	"
	26DD	"	"	"	—	"	"	"
	S380	"	"	"	—	"	"	"
	2740	"	"	"	—	"	"	"
	42, 2642 43 SER.	328580X	550397	3-P-452	378336	*378391	378447-9 (5/16"-18 x 1-3/4")	328593-11X
*Quantity required, two.								

Pump Mounting Suffix	Basic Model	Pump Flange Assembly Item No. 5	Bearing Cone Item No. 6	Output Shaft Item No. 8	Spacer 11/32" Thick Item No. 3	Lockring Item No. 7	Capscrew & Dimensions Quantity Required - Four Item No. 1	Conversion Kit Consists of Items 1 thru 8
118	41D, 41K	328580X	550397	3-P-247	—	378391	378447-8 (5/16"-18 x 1-1/2")	328591-19X
	A22L	"	"	"	—	"	"	"
	26DD	"	"	"	—	"	"	"
	S380	"	"	"	—	"	"	"
	2740	"	"	"	—	"	"	"
	42, 2642 43 SER.	328580X	550397	3-P-430	378336	*378391	378447-9 (5/16"-18 x 1-3/4")	328593-12X
*Quantity required, two.								

Suffix 114	Pump Make & Model	Suffix 118	Pump Make & Model
VICKERS V217-*4C (With 4-Bolt Pump Collar Removed)		COMMERCIAL P 15H *01**16 Series	WEBSTER YD - LT
		HYDRECO 2000 A 1 B** Series	WISCONSIN SM 200 MD****
			WOOSTER P3-9* H1-*.* Series

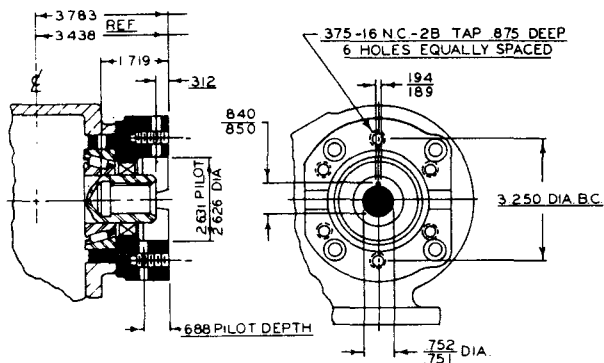
**Conversion Kits
Consist of Items
1 thru 8
Illustration**



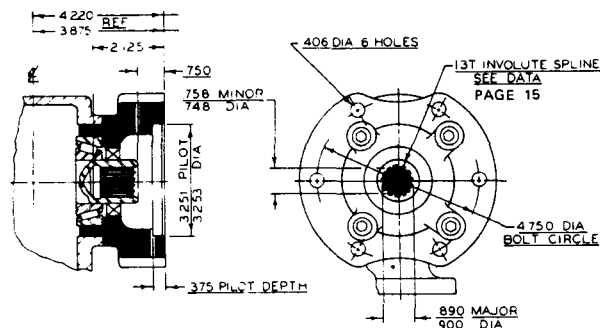
Item 6 (Bearing Cone) Not Supplied In Kit.

To convert a Conventional P.T.O. to a Hydraulic Pump Mount P.T.O., order Pump Conversion Kit for respective P.T.O.'s. Oil Seal 28-P-52 (Item 2) & Gaskets 22-P-24-1 & 22-P-24-2 (Item 4) are included in all kits.

POWER TAKE-OFFS For Use With DIRECT MOUNTING HYDRAULIC PUMPS



SUFFIX 130

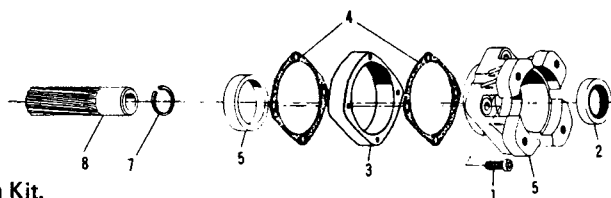


SUFFIX 159

Pump Mounting Suffix	Basic Model	Pump Flange Assembly Item No. 5	Bearing Cone Item No. 6	Output Shaft Item No. 8	Spacer 11/32" Thick Item No. 3	Lockring Item No. 7	Capscrew & Dimensions Quantity Required - Four Item No. 1	Conversion Kit Consists of Items 1 thru 8
130	41D, 41K	328583X	550397	3-P-284	—	378391	378447-7 (5/16"-18 x 1-1/4")	328591-20X
	A22L	"	"	"	—	"	"	"
	26DD	"	"	"	—	"	"	"
	S380 SER.	"	"	"	—	"	"	"
	2740	"	"	"	—	"	"	"
	42, 2642 43 SER.	328583X	550397	3-P-385	378336	*378391	378447-8 (5/16"-18 x 1-1/2")	328593-13X
*Quantity required, two.								
Pump Mounting Suffix	Basic Model	Pump Flange Assembly Item No. 5	Bearing Cone Item No. 6	Output Shaft Item No. 8	Spacer 11/32" Thick Item No. 3	Lockring Item No. 7	Capscrew & Dimensions Quantity Required - Four Item No. 1	Conversion Kit Consists of Items 1 thru 8
159	41D, 41K	328584X	550397	3-P-282	—	378391	378447-8 (5/16"-18 x 1-1/2")	328591-21X
	A22L	"	"	"	—	"	"	"
	26DD	"	"	"	—	"	"	"
	S380	"	"	"	—	"	"	"
	2740	"	"	"	—	"	"	"
	42, 2642 43 SER.	328584X	550397	3-P-351	378336	*378391	378447-9 (5/16"-18 x 1-3/4")	328593-14X
*Quantity required, two.								

Suffix 130	Pump Make & Model	Suffix 159	Pump Make & Model
COMMERCIAL	PD 124-**-23	DANA GEAR PUMPS	GRESEN
	thru		
	PD 334-**-23		
	P 15H-102-**-17		
	P 15H-202-**-17		
HYDRECO	P 15H-302-**-17		
	2000 A 11 E** Series		
	2000 F2 B8		
	2000 H2 B4		

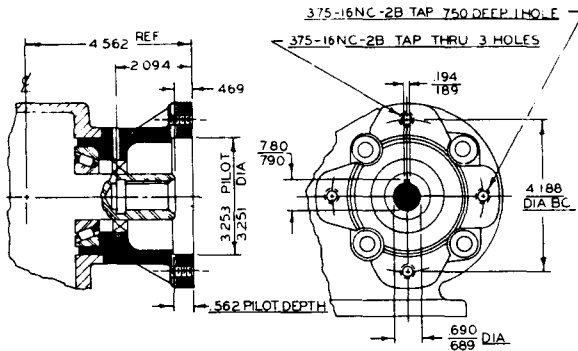
Conversion Kits
Consist of Items
1 thru 8
Illustration



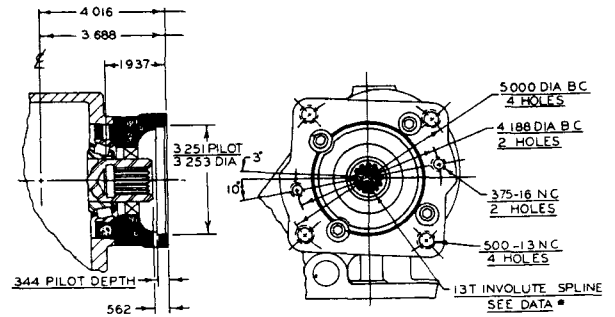
Item 6 (Bearing Cone) Not Supplied In Kit.

To convert a Conventional P.T.O. to a Hydraulic Pump Mount P.T.O., order Pump Conversion Kit shown above for respective P.T.O.'s. Oil Seal 28-P-52 (Item 2) & Gaskets 22-P-24-1 & 22-P-24-2 (Item 4) are included in all kits.

POWER TAKE-OFFS For Use With DIRECT MOUNTING HYDRAULIC PUMPS



SUFFIX 163



SUFFIX 220

Pump Mounting Suffix	Basic Model	Pump Flange Assembly Item No. 5	Bearing Cone Item No. 6	Output Shaft Item No. 8	Spacer 11/32" Thick Item No. 3	Lockring Item No. 7	Capscrew & Dimensions Quantity Required - Four Item No. 1	Conversion Kit Consists of Items 1 thru 8
163	41D, 41K	328580X	550397	3-P-330	—	378391	378447-8 (5/16"-18 x 1-1/2")	328591-22X
	S380	"	"	"	—	"	"	"
	A22L	"	"	"	—	"	"	"
	26DD	"	"	"	—	"	"	"
220	41D, 41K	328328X	550397	3-P-282	—	378391	378447-7 (5/16"-18 x 1-1/4")	328591-23X
	A22L	"	"	"	—	"	"	"
	26DD	"	"	"	—	"	"	"
	S380	"	"	"	—	"	"	"
	2740	"	"	"	—	"	"	"
	42, 2642	328328X	550397	3-P-351	378336	*378391	378447-8 (5/16"-18 x 1-1/2")	328592-15X
	43 SER.	"	"	"	"	"	"	"
	27, C3-C5	21-P-313	—	3-P-686	—	—	NO FIELD CONVERSION KIT AVAILABLE FOR 27 SERIES.	
	27, C4-C6	21-P-301	—	3-P-687	—	—		

* Quantity required, two.

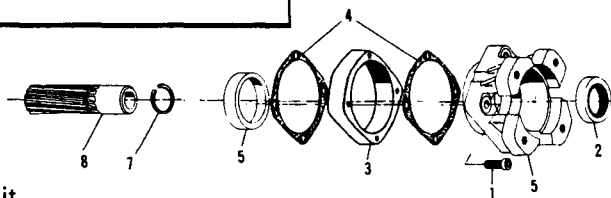
Suffix 163	Pump Make & Model	Suffix 220	Pump Make & Model
CESSNA	B15514 B20310, B20312 B20314, B20316 B20318, B20320 B20322, B20324 B20260, B20262 B20264, B20266 B20268, B20270 B20272, B20274 B15505, B15506 B15507, B15508 B15509, B15510 B15511, B15512	DANA	CD1-0007-B3RP CD2-0031-B3SP CD1-0013-B3RP CD1-0017-B3RP CD2-0022-B3SP DD1-0017-E3RP DD1-0017-03RP

Conversion Kits
Consist of Items
1 thru 8

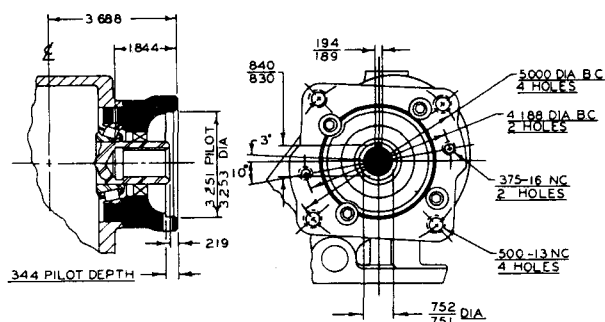
Illustration

Item 6 (Bearing Cone) Not Supplied In Kit.

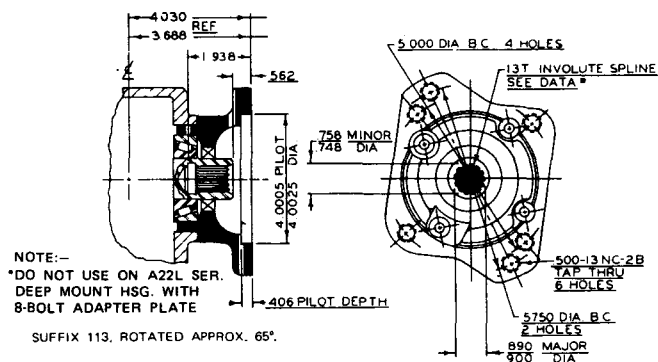
To convert a Conventional P.T.O. to a Hydraulic Pump Mount P.T.O., order Pump Conversion Kit shown above for respective P.T.O.'s. Oil Seal 28-P-52 (Item 2) & Gaskets 22-P-24-1 & 22-P-24-2 (Item 4) are included in all kits.



POWER TAKE-OFFS For Use With DIRECT MOUNTING HYDRAULIC PUMPS



SUFFIX 221



SUFFIX 222

Pump Mounting Suffix	Basic Model	Pump Flange Assembly Item No. 5	Bearing Cone Item No. 6	Output Shaft Item No. 8	Spacer 11/32" Thick Item No. 3	Lockring Item No. 7	Capscrew & Dimensions Quantity Required - Four Item No. 1	Conversion Kit Consists of Items 1 thru 8
221	41D	328328X	550397	3-P-441	—	378391	378447-7 (5/16"-18 x 1-1/4")	328591-24X
	41K	"	"	"	—	"	"	"
	S380	"	"	"	—	"	"	"
	A22L	"	"	"	—	"	"	"
	26DD	"	"	"	—	"	"	"
Pump Mounting Suffix	Basic Model	Pump Flange Assembly Item No. 5	Bearing Cone Item No. 6	Output Shaft Item No. 8	Spacer 11/32" Thick Item No. 3	Lockring Item No. 7	Capscrew & Dimensions Quantity Required - Four Item No. 1	Conversion Kit Consists of Items 1 thru 8
222	41D, 41K	328589X	550397	3-P-282	—	378391	378447-8 (5/16"-18 x 1-1/2")	329591-17X
	A22L	"	"	"	—	"	"	"
	26DD, S380	"	"	"	—	"	"	"
	2740	"	"	"	—	"	"	"
	42L 43 SER.	328589X	550397	3-P-351	378336	*378391	378447-9 (5/16"-18 x 1-3/4")	328593-10X

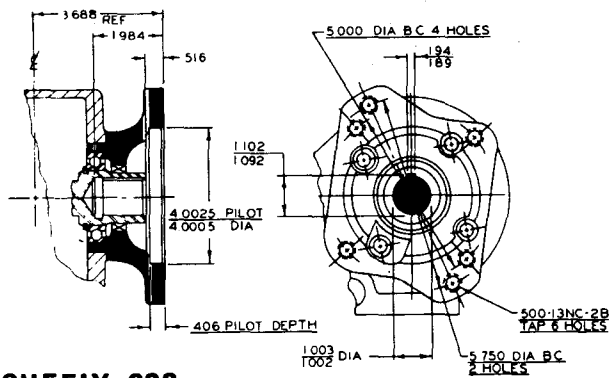
*Quantity required, two.

Suffix 221	Pump Make & Model	Suffix 222	Pump Make & Model
Conversion Kits consist of Items 1 thru 8. Illustration		CESSNA L20000-*D-* Series	DENISON T1C-***-23 Series
		CLARK 31 PFB 40 PFB	HYDRECO 2000 A 1 A*** Series 2000 A 7 A*** Series 2000 E1 A 1 A*** Series 2000 E1 F*** Series 2100 A 1 A*** Series
		COMMERCIAL P 15H-100**-16 P 15H-107**-16 P 15H-200**-16 P 15H-207**-16 P 15H-300**-16 P 15H-307**-16 P 36H-142**-25 P 36H-197**-25 P 36H-242**-25 P 36H-297**-25 P 36H-342**-25 P 36H-397**-25	VICKERS 2V***-11*10 5V***-11CC10 25V**-11*10 30V**-11*10
			WOOSTER P3-9-*J1-* thru P3-23-*J1-* P3-9-*S1-* thru P3-23-*S1-*

Item 6 (Bearing Cone) Not Supplied In Kit.

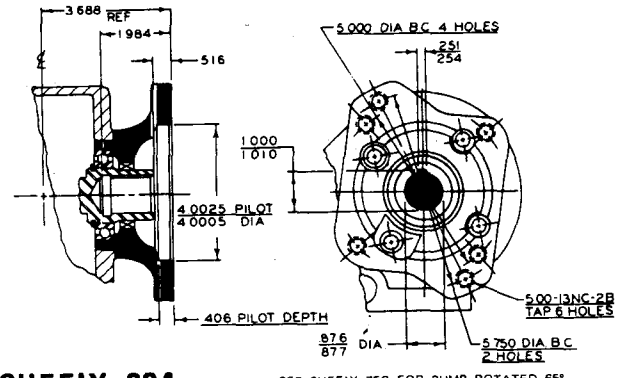
To convert a Conventional P.T.O. to a Hydraulic Pump Mount P.T.O., order Pump Conversion Kit shown above for respective P.T.O.'s. Oil Seal 28-P-52 (Item 2) & Gaskets 22-P-24-1 & 22-P-24-2 (Item 4) are included in all kits.

POWER TAKE-OFFS For Use With DIRECT MOUNTING HYDRAULIC PUMPS



SUFFIX 223

SEE SUFFIX 75B FOR PUMP ROTATED 65°.

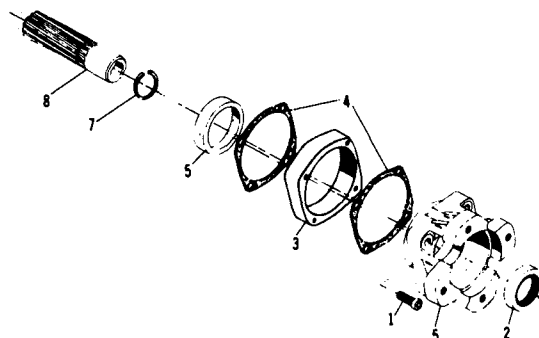


SUFFIX 224

SEE SUFFIX 75C FOR PUMP ROTATED 65°.

Pump Mounting Suffix	Basic Model	Pump Flange Assembly Item No. 5	Bearing Cone Item No. 6	Output Shaft Item No. 8	Spacer 11/32" Thick Item No. 3	Lockring Item No. 7	Capscrew & Dimensions Quantity Required – Four Item No. 1	Conversion Kit Consists of Items 1 thru 8
223	A22L, A22D	21-P-118	550697	3-P-308	4-P-65	378237	378447-8 (5/16"-18 x 1-1/2")	▲ 328591-5X
	A22LL, 26DD	"	550698	"	"	"	"	"
	41D	21-P-157	550697	3-P-308	4-P-65	378237	378447-8 (5/16"-18 x 1-1/2")	▲ 328591-7X
	41K	"	550698	"	"	"	"	"
Pump Mounting Suffix	Basic Model	Pump Flange Assembly Item No. 5	Bearing Cone Item No. 6	Output Shaft Item No. 8	Spacer 11/32" Thick Item No. 3	Lockring Item No. 7	Capscrew & Dimensions Quantity Required – Four Item No. 1	Conversion Kit Consists of Items 1 thru 8
224	A22L, A22D	21-P-118	550697	3-P-349	4-P-65	378237	378447-8 (5/16"-18 x 1-1/2")	▲ 328591-6X
	A22LL, 26DD	"	550698	"	"	"	"	"
	41D	21-P-157	550697	3-P-349	4-P-65	378237	378447-8 (5/16"-18 x 1-1/2")	▲ 328591-8X
	41K	"	550698	"	"	"	"	"
Suffix 223 Pump Make & Model					Suffix 224 Pump Make & Model			
HYDRECO 2000A 2000E (With Code #5 Shaft)					VICKERS PFB10 (With Opt. 1-3/4" Length Shaft)			

**Conversion Kits
Consist of Items
1 thru 8
Illustration**



Item 6 (Bearing Cone) Not Supplied In Kit.

To convert a Conventional P.T.O. to a Hydraulic Pump Mount P.T.O., order Pump Conversion Kit shown above for respective P.T.O.'s. Oil Seal 28-P-52 (Item 2) & Gaskets 22-P-24-1 & 22-P-24-2 (Item 4) are included in all kits.

POWER TAKE-OFFS For Use With DIRECT MOUNTING HYDRAULIC PUMPS

PUMP MODEL & SUFFIX REQUIRED

Manufacturer	Model	Suffix	Manufacturer	Model	Suffix
Barnes	GC-2985-A-RA-4	45A	Gresen (Cont'd.)	TC*16-***-D-*	"
Cessna	K15000-*.C* Series	96A		TC*20-***-D-*	"
	K15000-*.B* Series	"		TC*24-***-D-*	"
	L20000-*.D* Series	113, 222	Hydreco	1500 A7 B*** Series	49
	B20310, B20312	163		1500 D1 Series	"
	B20314, B20316	"		2000 F2 B2 Series	75A
	B20318, B20320	"		2000 F2 C2 Series	"
	B20322, B20324	"		2000 A5 E** Series	"
	B20260, B20262	"		2000 A9 E** Series	"
	B20264, B20266	"		2000 A11 B** Series	96A
	B20268, B20270	"		2000 A15 B** Series	"
	B20272, B20274	"		2115 A4 *	"
	B15505, B15506	"		2000 A1E*** Series	109
	B15507, B15508	"		2000 A7E** Series	"
	B15509, B15510	"		2000 A1A*** Series	113, 222
	B15511, B15512	"		2000 A7A*** Series	113, 222
	B15514	"		2000 E1A1A*** Series	113, 222
Clark	17PFR2-091	109		2000 E1F*** Series	113, 222
	31 PFB	113, 222		2100 A1A*** Series	113, 222
	40 PFB	113, 222		2000 A1B** Series	114
Commercial Shearing	P15H110**-17	58A		2000 A11E** Series	130
	B15H210**-17	"		2000 F2 B8	"
	P15H310**-17	"		2000 H2 B4	"
	PD121-*.23	"		2000 A	223,75B
	PD131-*.23	"		2000 E (With Code # Shaft)	223,75B
	PD221-*.23	"	Dana Gear Pump	0008 Series	46A
	PD231-*.23	"		0003 Series	102
	PD321-*.23	"		0004 Series	"
	PD331-*.23	"		0006 Series	"
	PD369*B*-23 Series	"		0008 Series	130
	P15H-101**-17	96A		0010 Series	"
	P15H-201**-17	"		0005 Series	104
	P15H-301**-17	"		0004 Series	"
	P15H-102**-16	109		0006 Series	"
	P15H-202**-16	"	Vickers	V110*-1C-10 Series	96A
	P15H-302**-16	"		V210-*.6C Series	"
	PD121**-.25 thru	112		V210-*.1C	102
	PD331**-.25	"		2V***-11*10	113, 222
	P15H-110**-16	"		5V***-11CC10	113, 222
	P15H-210**-16	"		25V***-11*10	113, 222
	P15H-310**-16	"		30V***-11*10	113, 222
	P15H-100*-16	113, 222		V217-*.4C (With 4-Bolt	
	P15H-107**-16	113, 222		pump collar removed)	118
	P15H-200**-16	113, 222		PFB10 (With Opt. 1-3/4"	
	P15H-207**-16	113, 222		Length Shaft)	224,75C
	P15H-300**-16	113, 222		MPFB	104A
	P15H-307**-16	113, 222		MPVB (With 5/8" dia. shaft,	104A
	P36H-142**-25	113, 222		1-1/4" long)	
	P36H-197**-25	113, 222	Webster	0, 1, 2, 3, 4 JDS Series	96A
	P36H-242**-25	113, 222		0, 1, 2, 3, 4 YDS Series	"
	P36H-297**-25	113, 222		0, 1, 2, 3 HCS	102
	P36H-342**-25	113, 222		0, 1, 2, 3, HCSV	"
	P36H-397**-25	113, 222		0, 1, 2, 3, HCM	"
	P15H*01**-16 Series	114		0, 1, 2, 3, XCM	"
	PD124-*.23 thru	130		0, 1, 2, 3, XCS	"
	PD334-*.23	"		1, 2, 3, 4, XCSV	"
	P15H-102**-17	"		YD-LT Special	114
	P15H-202**-17	"	Wisconsin	SM 200 MC****	109
	P15H-302**-17	"		SM 200 MD****	114
Dana	CD1-0007-B3RP	220	Wooster	P3-9*H1-*. * Series	114
	CD2-0031-B3SP	"		P3-9*J1-*. * thru	113, 222
	CD1-0013-B3RP	"		P3-23*J1-*. *	113, 222
	CD1-0017-B3RP	"		P3-9*S1-*. * thru	113, 222
	CD2-0022-B3SP	"		P3-23*S1-*. *	113, 222
	DD1-0017-E3RP	"			
	DD1-0017-O3RP	"			
Denison	T1C-***-23 Series	113, 222			
Gresen	TB*3-***-R- * Series	96A			
	TB*3-***-K- * thru	102			
	TB*12-***-K- *	102			
	TC*12-***-D- *	159			