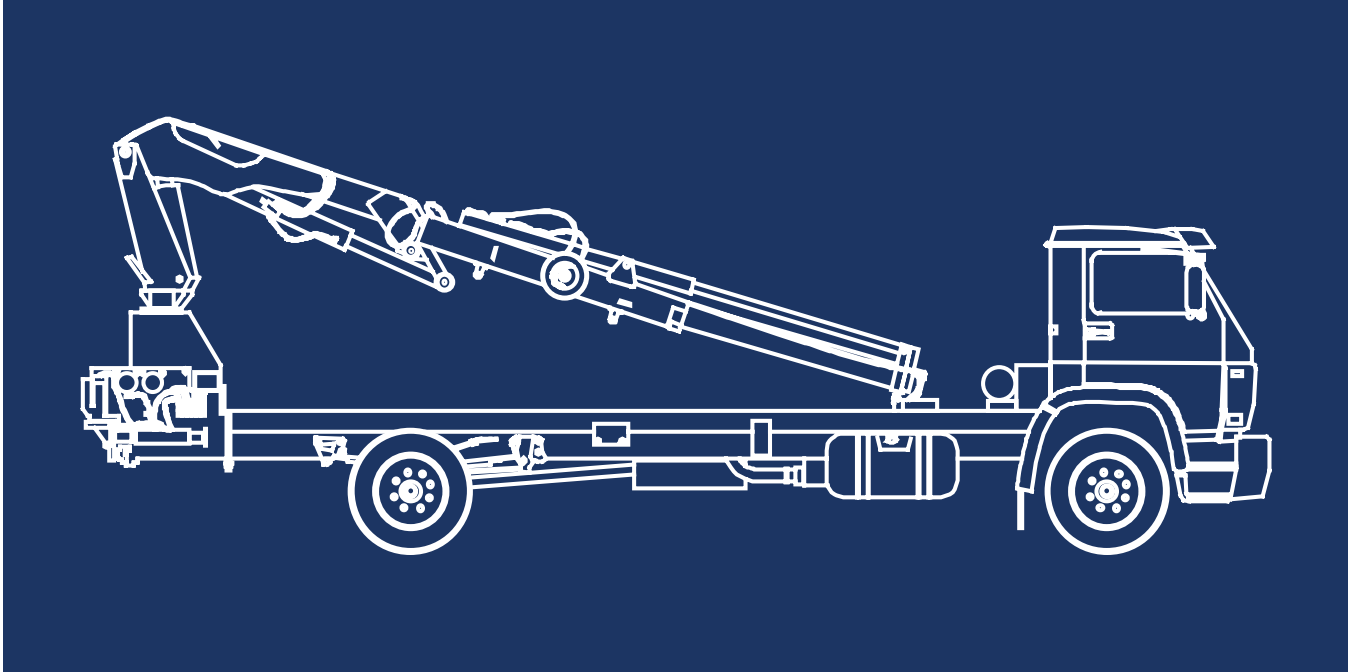
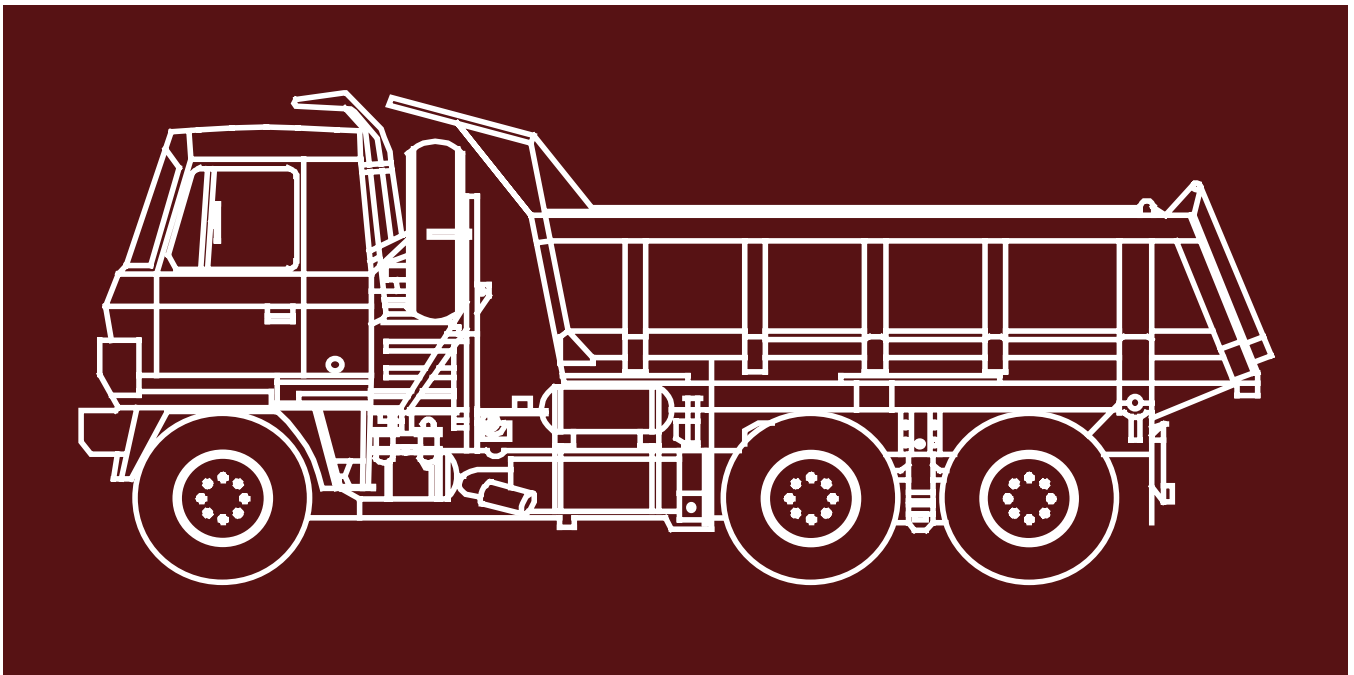


# Cotta®

## Transmission Company



## DRIVE PRODUCTS CATALOG



*Transfer Cases • Split-Shaft PTO • Fwd/Rev • Hi -Lo • Auxiliary*

The products in this catalog appear in the following table sorted decending by nominal HP capacity. Use this table for an initial selection. Contact Cotta with any questions or for assistance with product selection. For assistance to comprise appropriate design information navigate to the interactive Cotta Application Data Design Form. [Click here](#)

Note: The Nominal Power rating is application based and subject to change with application, service factor, duty cycle, and many other criteria.

Model	Nominal Power (hp)	Torque Capacity (lb-ft)	Center Distance Input to Output	No. of Shafts	Application (see below)
TR2248	725	1900	33.44	5	1
TR1397100	600	1500	19 in.	3	1
TR2205	600	2200	17	3	1
TR2217	600	2200	25.5	4	1
TR2090	600	1475	8.5	2	2
TR2237	500	1200	17	3	2
TR2238	500	1200	17	3	2
TR2273	450	1250	9	2	3
TS2083	450	1100	Concentric	N/A	4

1. Transfer case / drop box
2. Split Shaft PTO
3. Creep Drive
4. Reversing Gearbox

TOC TAB

## Cotta Drive Products Catalog

Click anywhere in the line to navigate to page

Tabulation of Products . . . . .	2
Table of Contents . . . . .	3
MODEL TR2248 . . . . .	4
TR2248 DRW. . . . .	5
MODEL TR1397100 . . . . .	6
TR1397100 DRW. . . . .	7
MODEL TR2205 . . . . .	8
TR2205 DRW. . . . .	9
MODEL TR2217 . . . . .	10
TR2217 DRW. . . . .	11
MODEL TR2090 . . . . .	12
TR2090 DRW. . . . .	13
MODEL TR2237 . . . . .	14
TR2237 DRW. . . . .	15
MODEL TR2238 . . . . .	16
TR2238 DRW. . . . .	17
MODEL TR2273 . . . . .	18
TR2273 DRW. . . . .	19
MODEL TS2083 . . . . .	20
TS2083 DRW. . . . .	21

TOC   TAB



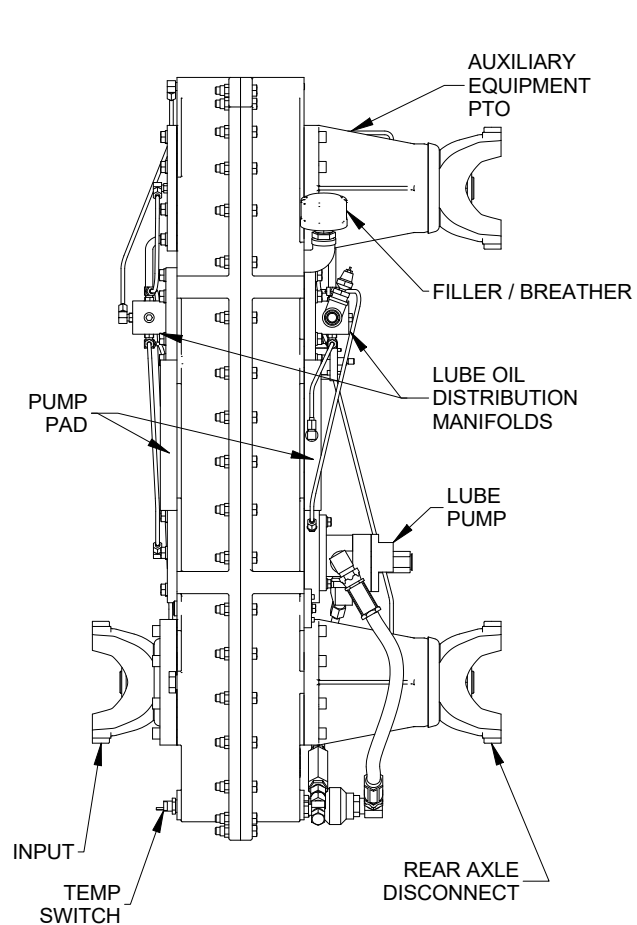
## MODEL TR2248 TRANSFER CASE

### Product Description:

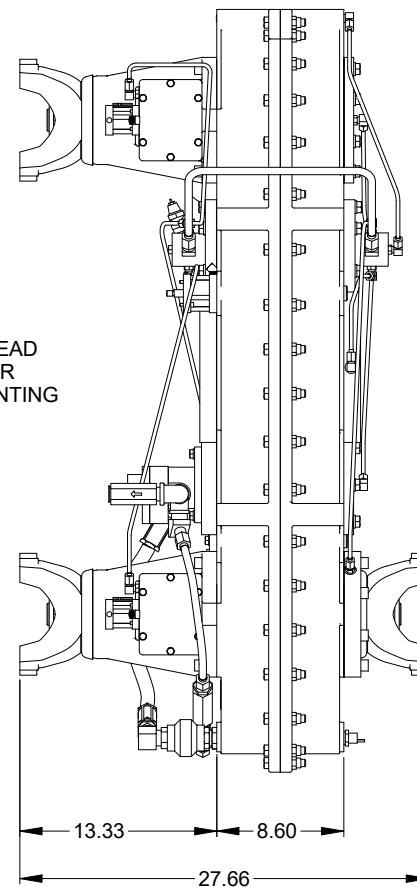
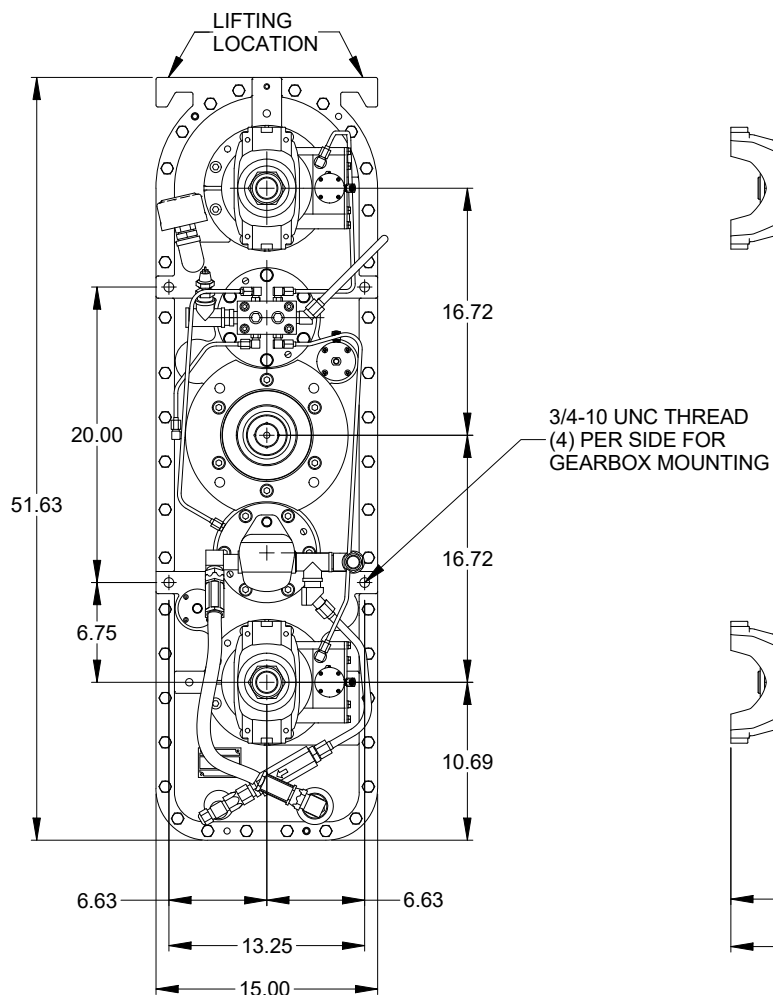
Model TR2248 is a 5 shaft transfer case designed to provide vehicle motive power to road to the work site and then shift to PTO to re-direct engine power to deck and ancillary equipment. A combination of internal and external disconnects (de-clutches) serve to shift from road-to-PTO as well as clutching and de-clutching the deck equipment. A variety of optional pump pads, disconnects, yokes, etc are available to power a wide range of ancillary equipment. The spec drawing on reverse side shows a typical configuration.

<b>NOMINAL APPLICATION POWER:</b>	725 HP
<b>TORQUE CAPACITY:</b>	1900 lb-ft. continuous through gears 12500 lb-ft. continuous through PTO shaft 17000 lb-ft. momentary through PTO shaft
<b>MAX SPEED:</b>	3000 RPM
<b>RATIO:</b>	1:1 input to output 1.2 overspeed input to pump-pad
<b>CENTER DISTANCE:</b>	33.44 inches input to output
<b>ROTATION:</b>	Output stations rotate same direction as input
<b>LUBRICATION:</b>	Internal reservoir. Lube pump furnished.
<b>SHIFTING:</b>	Air shift
<b>OUTPUT SHAFT SIZE:</b>	2.75-10 straight side spline
<b>COMMON OPTIONS:</b>	SAE and ISO yokes and flanges, disconnects, pump pads, clutches, stub shaft
<b>WEIGHT:</b>	Approximately 1200 lbs.

TOC TAB



EXAMPLE  
CONFIGURATION



TOC TAB

TR2248 DRW.



# MODEL TR1397100

## DIRECT MOUNT TRANSFER CASE

### Product Description:

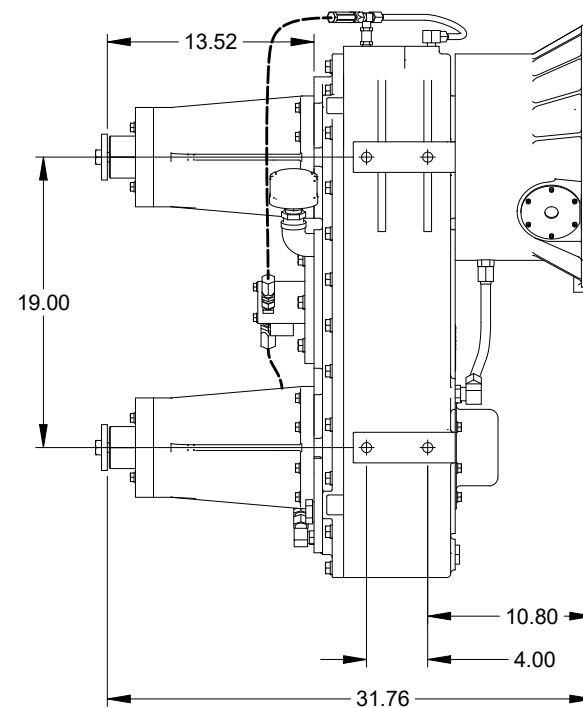
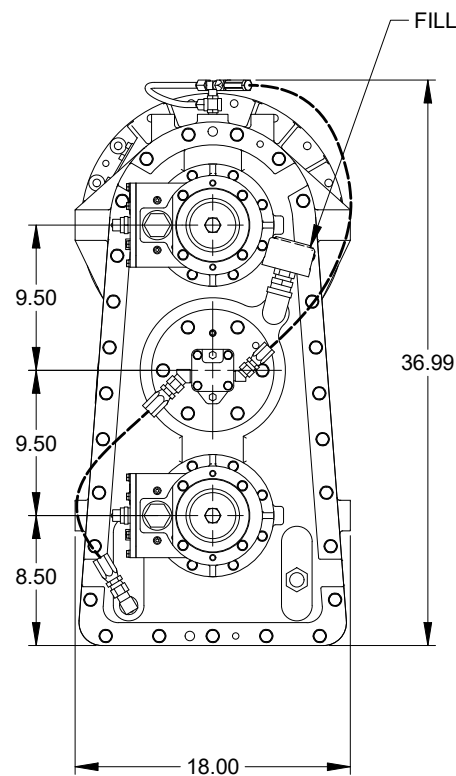
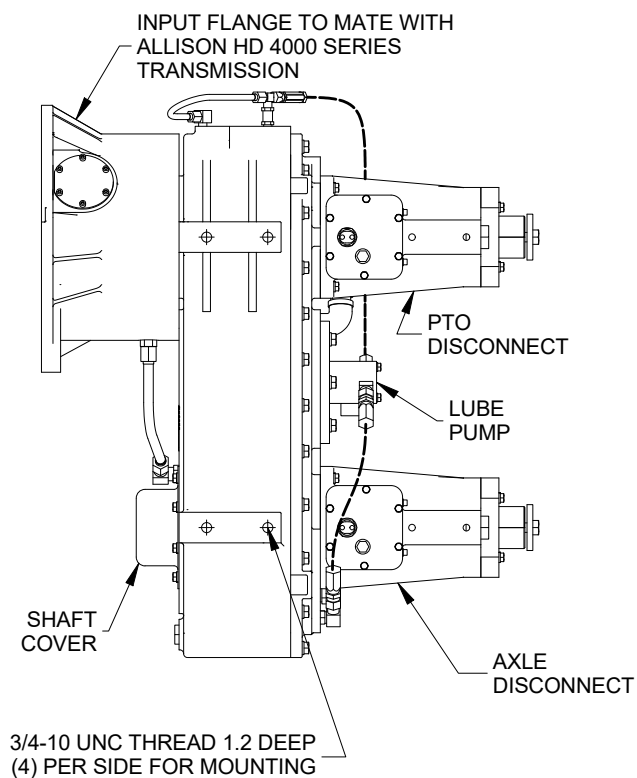
Model TR1397100 is a three shaft transfer case designed to direct mount via flange to Allison HD4000 Series transmissions. Three output stations are available for fitment with various options such as drive-line yokes, companion flanges, drive shafts, PTO disconnects, axle disconnects, pump pads, clutches, and similar ancillary equipment.

<b>NOMINAL APPLICATION POWER:</b>	600 HP
<b>INPUT TORQUE CAPACITY:</b>	1500 lb-ft. continuous through gears 12500 lb-ft continuous through PTO shaft 17500 lb-ft. momentary through PTO shaft
<b>MAX INPUT SPEED:</b>	3000 RPM
<b>RATIO:</b>	1:1 input to output
<b>CENTER DISTANCE:</b>	19 inches input to output
<b>ROTATION:</b>	Outputs rotate same direction as input
<b>LUBRICATION:</b>	Internal reservoir. Lube pump furnished.
<b>SHIFTING:</b>	Disconnects are air shift. Mechanical shift option available
<b>OUTPUT SHAFT SIZE:</b>	2.75-10 straight side spline
<b>COMMON OPTIONS:</b>	SAE and ISO yokes and flanges, disconnects, pump pads, clutches, stub shaft
<b>WEIGHT:</b>	Approximately 1400 lbs.

TOC TAB



This drawing shows general arrangement and approximate space claim. Do not design, scale, or lay out using this drawing. Use only certified drawings provided by Cotta Engineering.



TOC TAB

TR1397100 DRW.



# MODEL TR2205 TRANSFER CASE

## Product Description:

The TR2205 is a 3 shaft transfer case is designed for maximum application flexibility. The T-case has mirror symmetry and provides four identical Input/output stations. Each station has a 2.75 X 10 splined shaft and can be fitted with yokes or flanges. A disconnect (de-clutch) can be fitted to the I/O stations to provide power interruption. An optional line of disconnects feature SAE pump pad outputs. A special version of TR2205 can be mounted horizontally. Depending upon option type and placement the TR2205 can be configured as a transfer case, drop box, PTO, or pump drive. Most options are available for field retrofit without having to return, remove, or disassemble the gearbox.

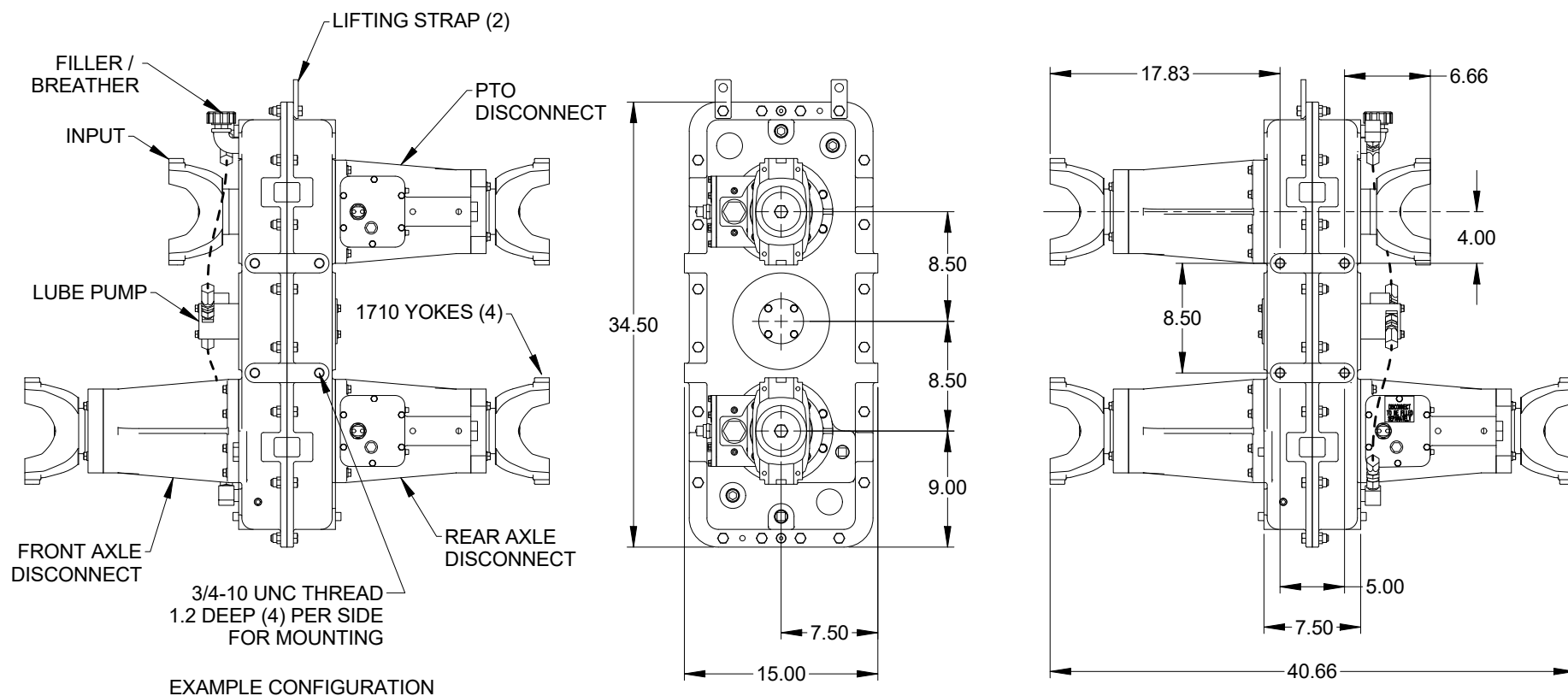
<b>NOMINAL APPLICATION POWER:</b>	600 HP
<b>TORQUE CAPACITY:</b>	2200 lb-ft. continuous through gears 6800 lb-ft. continuous through shaft 17000 lb-ft. momentary through shaft
<b>MAX SPEED:</b>	2800 RPM
<b>RATIO:</b>	1:1 input to output
<b>CENTER DISTANCE:</b>	17 inches input to output
<b>ROTATION:</b>	Outputs rotate same direction as input
<b>LUBRICATION:</b>	Internal reservoir. Lube pump furnished.
<b>SHIFTING:</b>	Disconnects are air shift. Mechanical shift option available
<b>OUTPUT SHAFT SIZE:</b>	2.75-10 straight side spline
<b>COMMON OPTIONS:</b>	SAE and ISO yokes and flanges, disconnects, pump pads, clutches, stub shaft
<b>WEIGHT:</b>	Approximately 600 lbs. w/o options

TOC TAB





This drawing shows general arrangement and approximate space claim. Do not design, scale, or lay out using this drawing. Use only certified drawings provided by Cotta Engineering.



TOC TAB

TR2205 DRW.



# MODEL TR2217

## TRANSFER CASE

### Product Description:

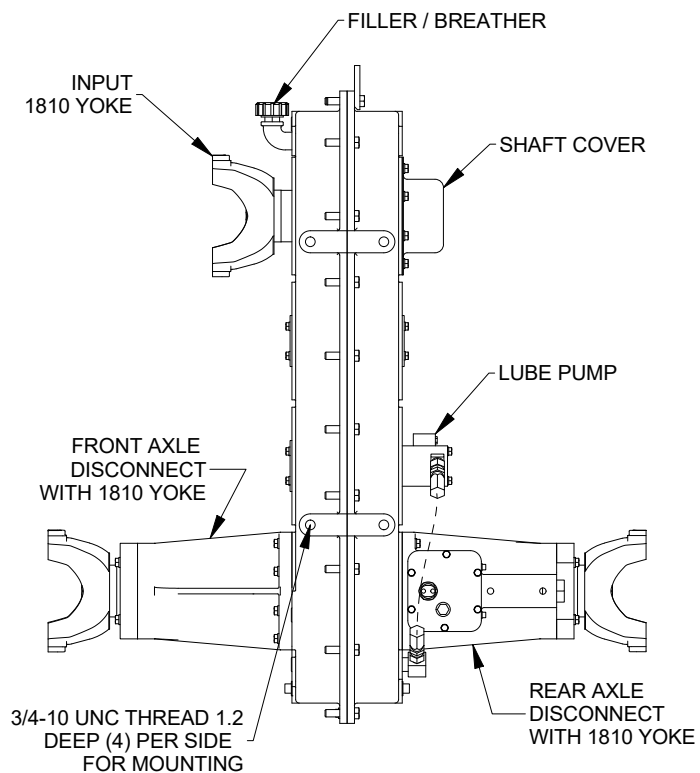
Model TR2217 is a 4 shaft transfer case is designed for maximum application flexibility and provides up to six identical Input/output stations. Each station can be provided with 2.75 X 10 splined shaft for fitment to with yokes or flanges. A disconnect (de-clutch) can also be fitted to the I/O stations to provide power interruption. An optional line of disconnects feature SAE pump pad outputs. Depending upon option type and placement the TR2217 can be configured as a transfer case, drop box, PTO, or pump drive. Most options are available for field retrofit without having to return, remove, or disassemble the gearbox.

<b>NOMINAL APPLICATION POWER:</b>	600 HP
<b>TORQUE CAPACITY:</b>	2200 lb-ft. continuous through gears 6800 lb-ft. continuous through shaft 17000 lb-ft. momentary through shaft
<b>MAX SPEED:</b>	2800 RPM
<b>RATIO:</b>	1.15 overspeed, 1.15 reduction, 1.0, depending upon input location.
<b>CENTER DISTANCE:</b>	25.5 inches
<b>ROTATION:</b>	Two shafts rotate same as input, and two same as output.
<b>LUBRICATION:</b>	Internal reservoir. Lube pump furnished.
<b>SHIFTING:</b>	Disconnects are air shift. Mechanical shift option available
<b>OUTPUT SHAFT SIZE:</b>	2.75-10 straight side spline
<b>COMMON OPTIONS:</b>	SAE and ISO yokes and flanges, disconnects, pump pads, clutches, stub shaft
<b>WEIGHT:</b>	Approximately 715 lbs. w/o options

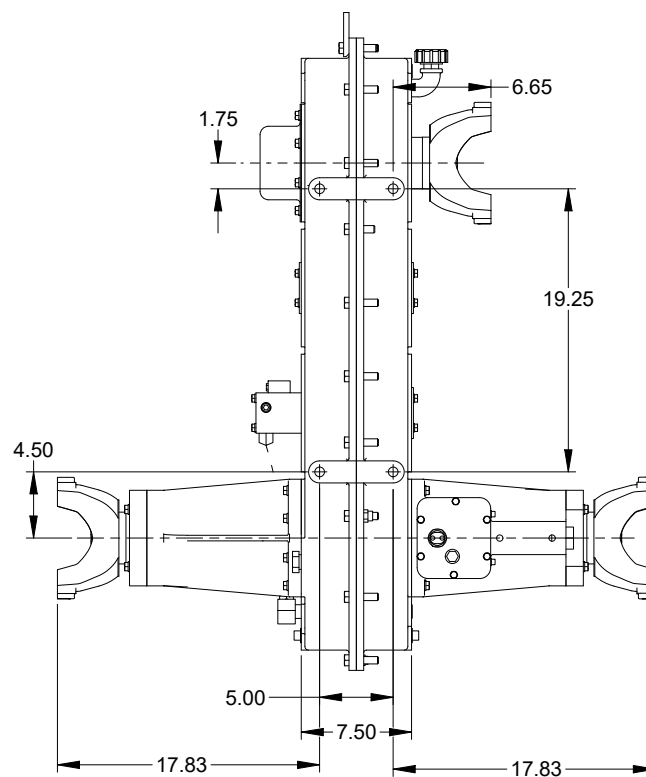
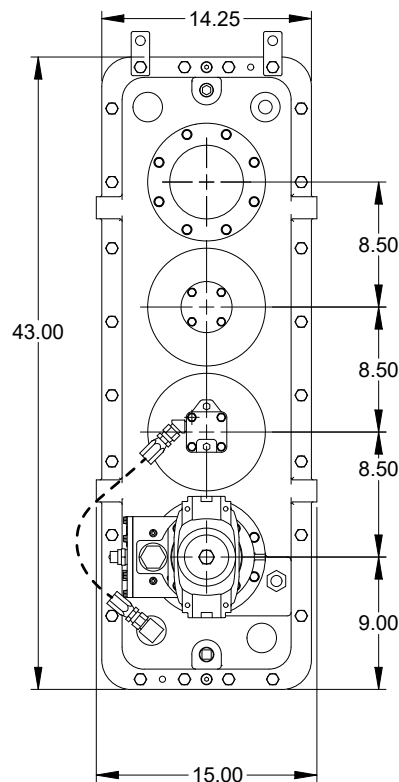
TOC TAB



This drawing shows general arrangement and approximate space claim. Do not design, scale, or lay out using this drawing. Use only certified drawings provided by Cotta Engineering.



EXAMPLE CONFIGURATION USING FOUR OF THE SIX I/O STATIONS.



TOC TAB

TR2217 DRW.



# MODEL TR2090

## SPLIT-SHAFT TRANSFER CASE

### Product Description:

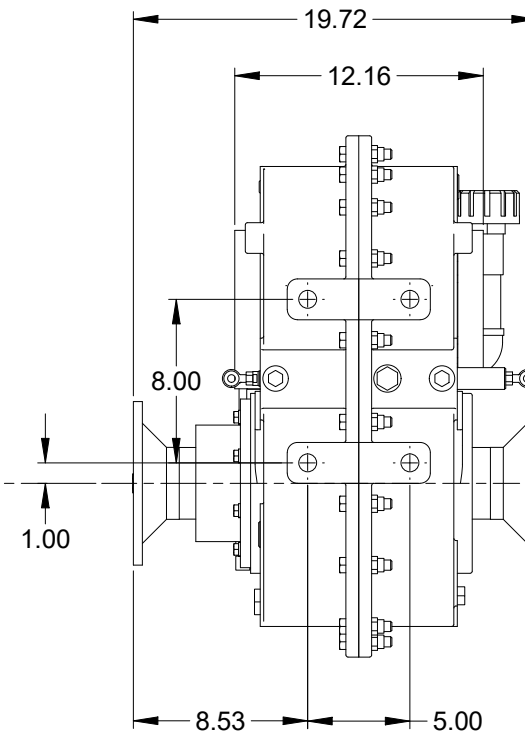
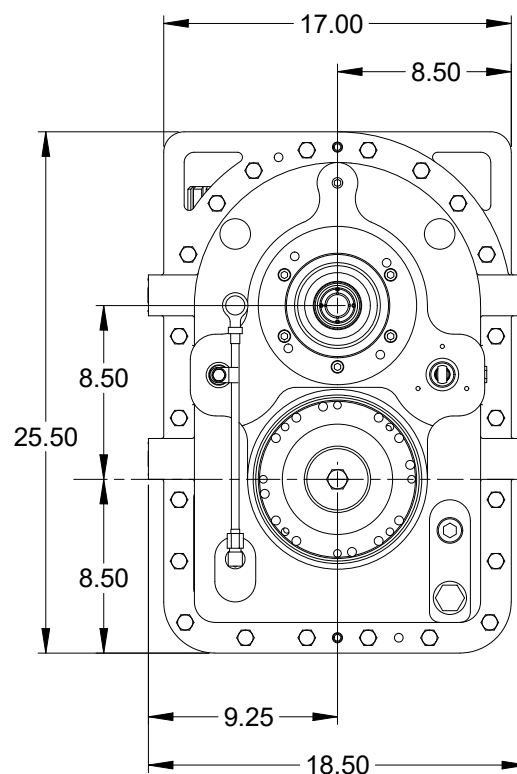
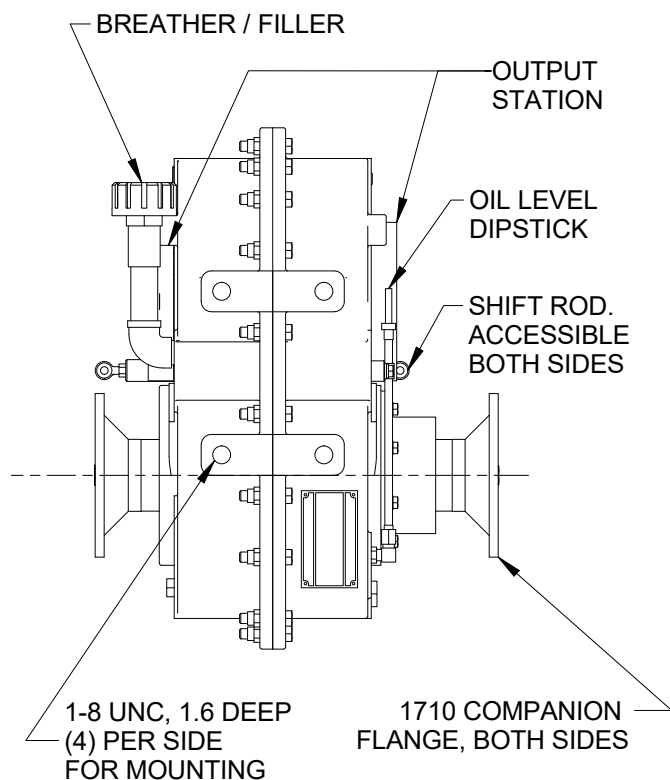
Model TR2090 is a 2 stage split-shaft transfer case designed to selectively route vehicle engine power to either the drive-axle (road mode), or to the deck/ancillary equipment (PTO mode). The term split-shaft owes to the through-drive shaft consisting of two separate shafts (split) even though outwardly appearing to be a single shaft. In operation the drive shafts are coupled together by an integral splined clutch for roading and then de-coupled by shifting to PTO at the work site. The integral clutch design provides that shifting to or from either mode simultaneously and fully disengages the other mode.

<b>NOMINAL APPLICATION POWER:</b>	600 HP
<b>TORQUE CAPACITY:</b>	1475 lb-ft. continuous at PTO 12500 lb-ft. continuous through drive shaft 17500 lb-ft. momentary through drive shaft
<b>MAX SPEED:</b>	3000 RPM through shaft 2300 RPM through PTO
<b>RATIO:</b>	1:1 input to output 1.08 input to PTO
<b>CENTER DISTANCE:</b>	8.5 inches input to PTO
<b>ROTATION:</b>	PTO rotates opposite direction as input
<b>LUBRICATION:</b>	Internal reservoir.
<b>SHIFTING:</b>	Air shift. Mechanical shift option available.
<b>OUTPUT SHAFT SIZE:</b>	2.75-10 straight side spline
<b>COMMON OPTIONS:</b>	SAE and ISO yokes and flanges, disconnects, pump pads, clutches, splined and stub shaft
<b>WEIGHT:</b>	Approximately 475 lbs.

TOC TAB



This drawing shows general arrangement and approximate space claim. Do not design, scale, or lay out using this drawing. Use only certified drawings provided by Cotta Engineering.



TOC TAB

TR2090 DRW.



# MODEL TR2237

## SPLIT-SHAFT TRANSFER CASE

### Product Description:

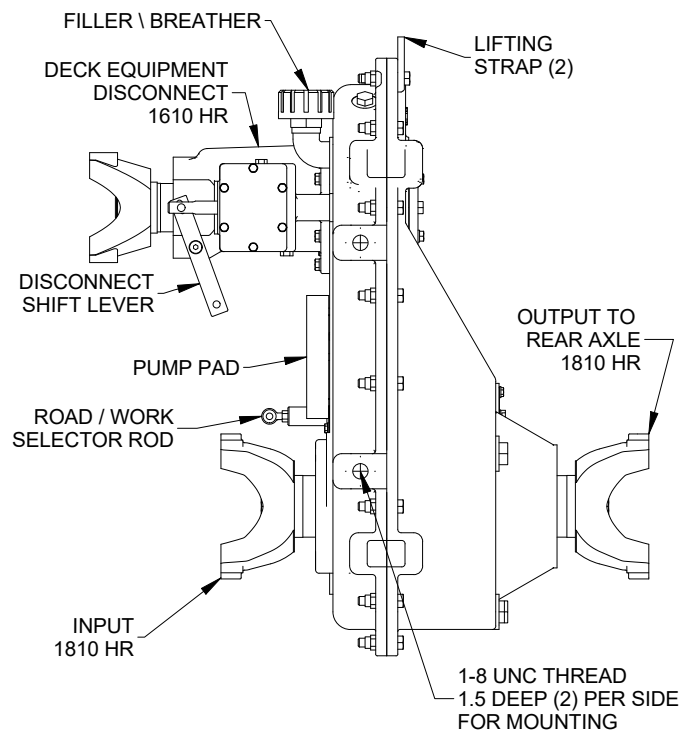
Model TR2237 is a 3 stage split-shaft transfer case designed to selectively route vehicle engine power to either the drive-axle (road mode), or to the deck/ancillary equipment (PTO mode). The term split-shaft owes to the through-drive shaft consisting of two separate shafts (split) even though outwardly appearing to be a single shaft. In operation the drive shafts are coupled together by an integral splined clutch for roading and then de-coupled by shifting to PTO at the work site. The integral clutch design provides that shifting to or from either mode simultaneously and fully disengages the other mode.

<b>NOMINAL APPLICATION POWER:</b>	500 HP
<b>TORQUE CAPACITY:</b>	1200 lb-ft. continuous through gears 12500 lb-ft. continuous through drive shaft 17500 lb-ft. momentary through drive shaft
<b>MAX SPEED:</b>	3000 RPM input
<b>RATIO:</b>	1:1 input to top PTO 1.075 input to center PTO
<b>CENTER DISTANCE:</b>	17 inches input to top PTO 8.5 inches input to center PTO
<b>ROTATION:</b>	Top PTO rotates same direction as input Center PTO rotates opposite input
<b>LUBRICATION:</b>	Internal reservoir.
<b>SHIFTING:</b>	Air shift. Mechanical shift option available.
<b>OUTPUT SHAFT SIZE:</b>	2.75-10 straight side spline
<b>COMMON OPTIONS:</b>	SAE and ISO yokes and flanges, disconnects, pump pads, clutches, splined and stub shafts, lube pump.
<b>WEIGHT:</b>	Approximately 600 lbs.

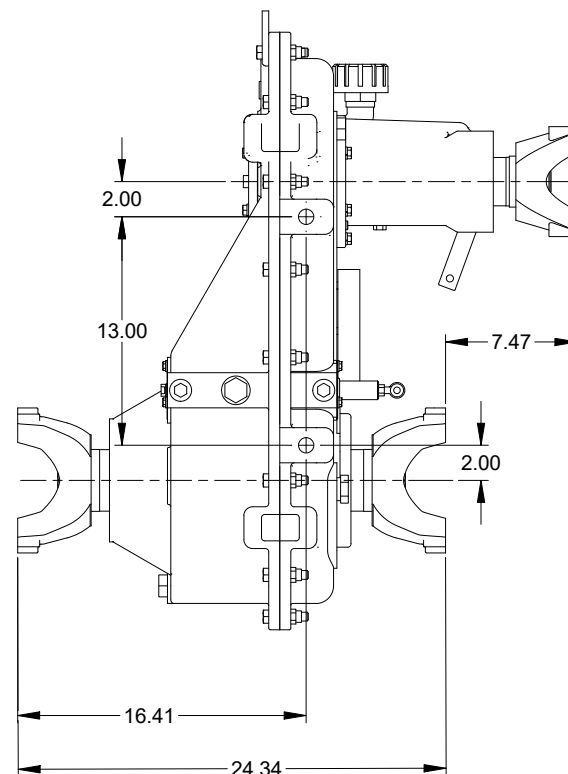
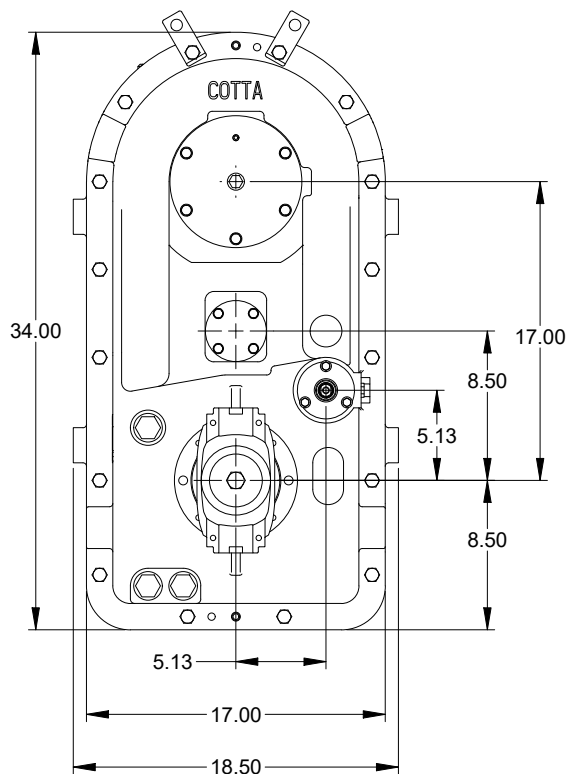
TOC TAB



This drawing shows general arrangement and approximate space claim. Do not design, scale, or lay out using this drawing. Use only certified drawings provided by Cotta Engineering.



TR2237 EXAMPLE  
CONFIGURATION



TOC TAB

TR2237 DRW.



# MODEL TR2238

## SPLIT-SHAFT TRANSFER CASE

### Product Description:

Model TR2238 is a 3 stage over-speed split-shaft transfer case designed to selectively route vehicle engine power to either the drive-axle (road mode), or to the deck/ancillary equipment (PTO mode). The term split-shaft owes to the through-drive shaft consisting of two separate shafts (split) even though outwardly appearing to be a single through shaft. In operation the drive shafts are coupled together by an integral splined clutch for roading and then de-coupled by shifting to PTO at the work site. The integral clutch design provides that shifting to or from either mode simultaneously and fully disengages the other mode.

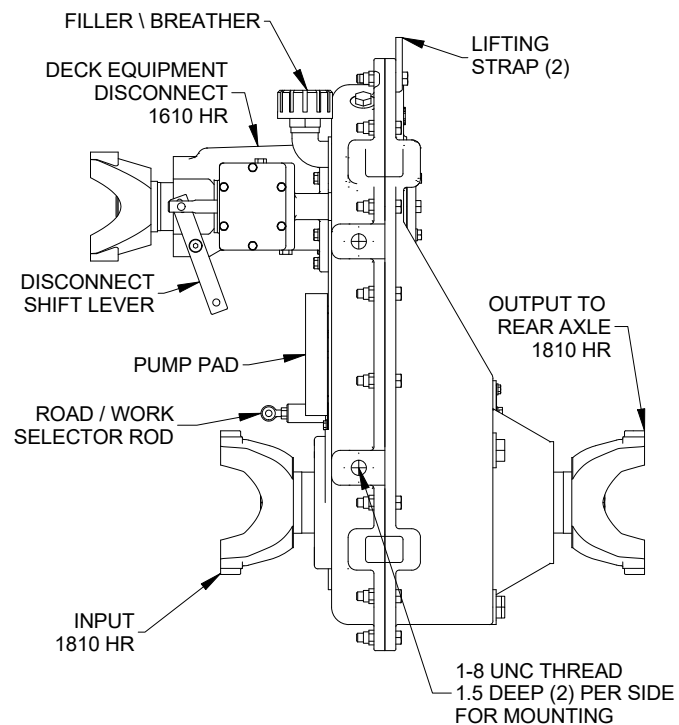
<b>NOMINAL APPLICATION POWER:</b>	500 HP
<b>TORQUE CAPACITY:</b>	1200 lb-ft. continuous at PTO 12500 lb-ft. continuous through drive shaft 17500 lb-ft. momentary through drive shaft
<b>MAX SPEED:</b>	3000 RPM input
<b>RATIO:</b>	1.2, 1.4 overspeed input to top PTO 1.17 overspeed input to center PTO (1.2 ratio) 1.32 reduction input to center PTO (1.4 ratio)
<b>CENTER DISTANCE:</b>	17 inches input to top PTO CD to center varies with ratio
<b>ROTATION:</b>	Top PTO rotates same direction as input Center PTO rotates opposite to input
<b>LUBRICATION:</b>	Internal reservoir.
<b>SHIFTING:</b>	Air shift. Mechanical shift option available.
<b>OUTPUT SHAFT SIZE:</b>	2.75-10 straight side spline
<b>COMMON OPTIONS:</b>	SAE and ISO yokes and flanges, disconnects, pump pads, clutches, splined and stub shaft
<b>WEIGHT:</b>	Approximately 600 lbs.

TOC TAB

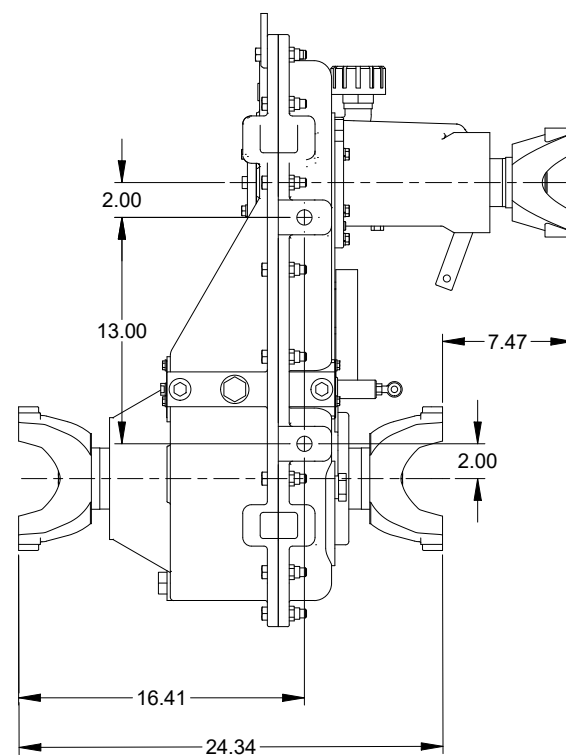
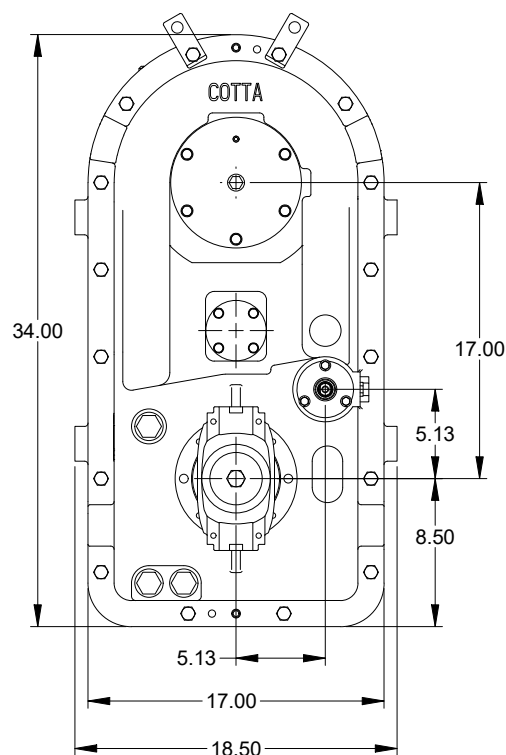




This drawing shows general arrangement and approximate space claim. Do not design, scale, or lay out using this drawing. Use only certified drawings provided by Cotta Engineering.



TR2238 EXAMPLE  
CONFIGURATION



TOC TAB

TR2238 DRW.

### Product Description:

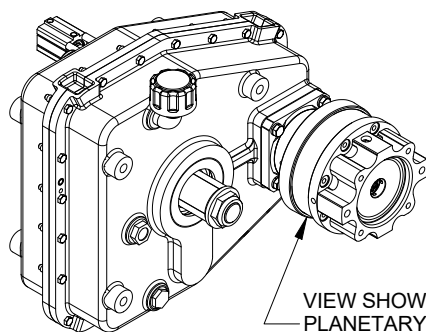
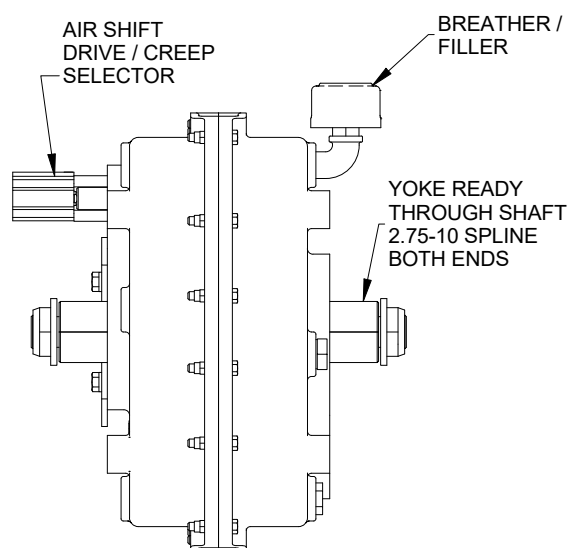
Model TR2273 is an auxiliary gearbox designed to provide precision vehicle speed control by using a hydraulic motor to rotate the vehicle drive shaft. The Creep Drive gearbox is installed in the drive-line between the main transmission and rear axle. In road mode power is transmitted normally via a through shaft in the gearbox. In creep mode the main transmission is shifted to neutral and the hydraulic motor and reduction gear-set in the gearbox are engaged to rotate the drive-line. Applications include paint-striper, feeders, spreaders, lifts, road/rail, and similar uses requiring precise speed control, inching, or remote operation.

<b>NOMINAL APPLICATION POWER:</b>	450 HP
<b>MAX INPUT SPEED:</b>	3000 RPM Drive shaft 500 RPM Motor pad.
<b>TORQUE CAPACITY:</b>	Drive shaft - 12,500 lb-ft. Motor pad - 1250 lb-ft
<b>REDUCTION RATIO:</b>	3:1 gearbox 13.5:1 using optional 4.5:1 input planetary
<b>MOTOR/PUMP PAD:</b>	SAE "C" SAE "D" with optional planetary gearbox
<b>THROUGH SHAFT SPLINE SIZE:</b>	2.75 X 10 Straight side
<b>MOUNTING:</b>	(4) 3/4"-10 tapped holes on 11"X13" rectangular pattern
<b>LUBRICATION:</b>	Internal reservoir. Splash delivery
<b>SHIFTING:</b>	Dual acting air cylinder
<b>WEIGHT:</b>	Approximately 400 lbs.

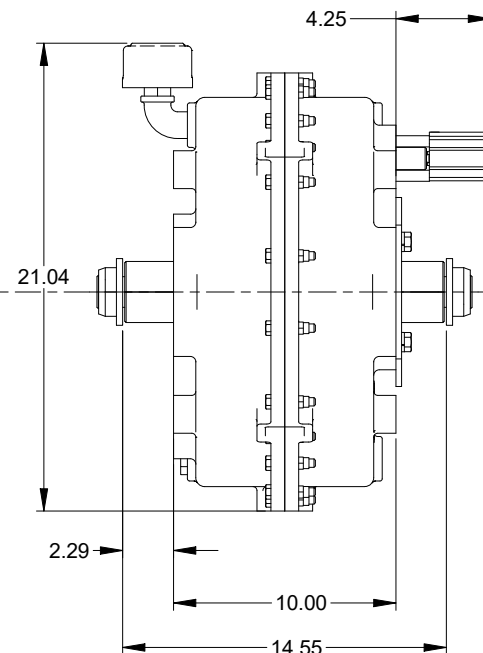
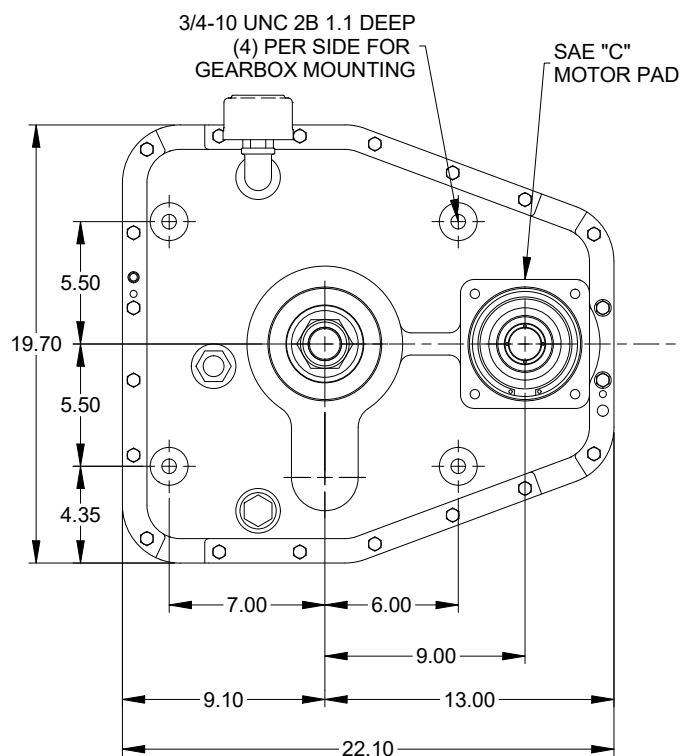
TOC TAB



This drawing shows general arrangement and approximate space claim. Do not design, scale, or lay out using this drawing. Use only certified drawings provided by Cotta Engineering.



VIEW SHOWS OPTIONAL  
PLANETARY MOUNTED ON  
INPUT TO INCREASE RATIO



TOC TAB

TR2273 DRW.



## MODEL TS2083 REVERSING GEARBOX

### Product Description:

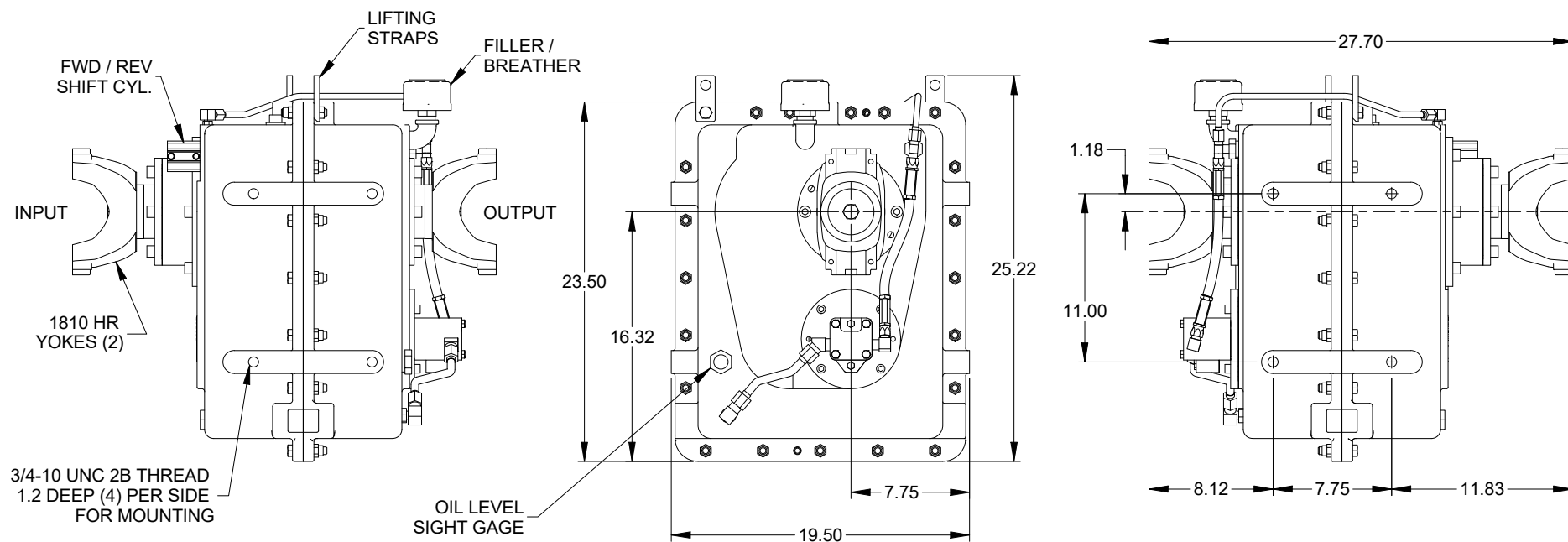
Model TS2083 is a forward/reverse gearbox designed for road/rail vehicles. The gearbox is installed between the main transmission and drive axle and when shifted to reverse uses the main transmission to provide vehicle travel backward on rail at the same speeds as forward. In forward mode power is transmitted to the axle normally via the through shaft.

<b>NOMINAL APPLICATION POWER:</b>	450 HP
<b>TORQUE CAPACITY:</b>	Input: 1100 lb-ft. Fwd mode momentary torque 17000 lb-ft.
<b>MAX SPEED:</b>	2500 RPM input
<b>RATIO:</b>	1:1 fwd 1:1 rev
<b>LUBRICATION:</b>	Internal reservoir.
<b>SHIFTING:</b>	Air shift. Mechanical shift option available.
<b>OUTPUT SHAFT SIZE:</b>	2.75-10 straight side spline
<b>COMMON OPTIONS:</b>	SAE and ISO yokes and flanges
<b>WEIGHT:</b>	Approximately 700 lbs.

TOC TAB



This drawing shows general arrangement and approximate space claim. Do not design, scale, or lay out using this drawing. Use only certified drawings provided by Cotta Engineering.



TOC TAB

TS2083 DRW.



ISO 9001 Quality  
Management



*Global Supplier of Power Transmission Systems and Components*

**Cotta Transmission  
Company, LLC  
1301 Prince Hall Drive  
Beloit, WI 53511**

608-368-5600  
[www.cotta.com](http://www.cotta.com)

**Member  
American Gear  
Manufacturers  
Association**

