Muncie Power Products, Inc.

HORIZONTAL SPLIT-SHAFT UNIT

SSH2-14 SERIES **14,400 lb.ft. (2000 Kgm) Through Torque**

SSH2-21 SERIES **21,600 lb.ft. (3000 Kgm) Through Torque**

Mounting Location:
Inserted in the driveshaft between transmission and rear axle.

PTO torque capability:
940 lb.ft. (130 Kgm) max total combined for each output shaft at 1500 RPM (Output 1+2 or output 3+4)

Output Shaft Options:
Up to four outputs - two to front, two to rear- independently shiftable PTO's for hydraulic pumps or prop-shaft drive.

Auxiliary power available with the vehicle in motion.

Drive connection to rear axle independent of PTO operation.

Optional switch for warning light when main drive is disconnected. (order 2053310000 Switch Kit separately)

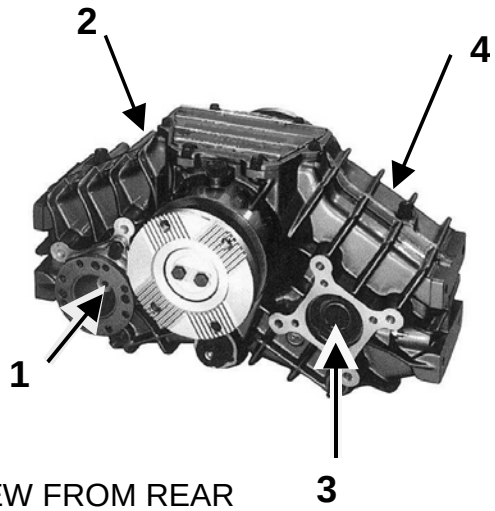
PTO OUTPUT RATIO: 1.28:1

Max. Output Shaft Speed = 2500 RPM

PTO output rotation: opposite input

Base Unit Weight: SSH2-14 227 lbs. (103Kg)
SSH2-21 234 lbs. (106Kg)

Optional Mounting Kit 2991010000 (2 required)



VIEW FROM REAR

SS H2 - 14 X5 - A X X X X X

SS: Split Shaft

Series
H2 - 1.28:1 ratio out

Through-Torque Rating:
14 = 14,400 lbft
21 = 21,600 lbft

Main Shaft Thru Flanges:
X5 = 1550/1610/1710/1810 (14 Only)
XC = 1610/1710/1810 (21 Only)

Main Shaft & Output Shift Options:
includes air controls for through-shaft and output shafts
A - Manual Air 12V
E - Electric Air 12V

Special Features:
X - None

Output Shaft Options:

Output R.S. #4 - Forward
(Same Options as Below)

Output R.S. #3 - Rear
(Same Options as Below)

Output L.S. #2 - Forward
(Same Options as Below)

Output L.S. #1 - Rear
X - Opening Covered
C - 1410 Comp. Flng.
D - 1550 Comp. Flng.
E - SAE "C" Hyd. Mntg.
K - SAE "B" Hyd. Mntg.
I - DIN 5462 (129015030000 Gasket recommended, not included)
P - SAE "B-B" Hyd. Mntg.

NOTE: Vehicle must be stationary when shifting either main shaft or output shafts into or out of gear.

Muncie Power Products, Inc.

Work Sheet SSH2 SERIES

		Model	Thru Flange Option	Shift Option	Output L.S. #1 - Rear	Output R.S. #2 - Rear	Output L.S. #3 - Forward	Output R.S. #4 - Forward	Special Feature		
	FILL IN YOUR OPTIONS:										
	EXAMPLE:	SSH2-14	X5	- A	X	X	X	X	X		Bill Of Materials
SSH2-14 SSH2-21	3290120202 3290220202									QTY 1	________________
X5 (SSH2-14 only) XC (SSH2-21 only)	2053500000 2054050000									2	________________
A E	48TK4428 48TK4429(1 REQ. for ea. output kit) 48TK4430 48TK4431(1 REQ. for ea. output kit)									1 # Or 1 #	________________ ________________ ________________ ________________
X - Opening Covered C - 1410 Comp. Flng. D - 1550 Comp. Flng. E - SAE "C" Hyd. Mntg. K - SAE "B" Hyd. Mntg. I - DIN 5462 P - SAE "B-B" Hyd. Mntg.	None 2053490000 2053640000 2054260000 3520510000B STANDARD 3520520000B									1	________________
X - Opening Covered C - 1410 Comp. Flng. D - 1550 Comp. Flng. E - SAE "C" Hyd. Mntg. K - SAE "B" Hyd. Mntg. I - DIN 5462 P - SAE "B-B" Hyd. Mntg.	None 2053490000 2053640000 2054260000 3520510000B STANDARD 3520520000B									1	________________
X - Opening Covered C - 1410 Comp. Flng. D - 1550 Comp. Flng. E - SAE "C" Hyd. Mntg. K - SAE "B" Hyd. Mntg. I - DIN 5462 P - SAE "B-B" Hyd. Mntg.	None 2053490000 2053640000 2054260000 3520510000B STANDARD 3520520000B									1	________________
X - Opening Covered C - 1410 Comp. Flng. D - 1550 Comp. Flng. E - SAE "C" Hyd. Mntg. K - SAE "B" Hyd. Mntg. I - DIN 5462 P - SAE "B-B" Hyd. Mntg.	None 2053490000 2053640000 2054260000 3520510000B STANDARD 3520520000B									1	________________
X - None	None										None
MOUNTING KIT	2991010000									2	2991010000

Muncie Power Products, Inc.

VERTICAL SPLIT-SHAFT UNIT

SSV*-14 SERIES **14,400 lb.ft. (2000 Kgm) Through Torque**

SSV*-21 SERIES **21,600 lb.ft. (3000 Kgm) Through Torque**

Mounting Location:
Inserted in the driveshaft between transmission and rear axle.

PTO torque capability:
SSV2 = 940 lb.ft. (130 Kgm) max total combined for each output shaft (1&2 Only) at 1500 RPM

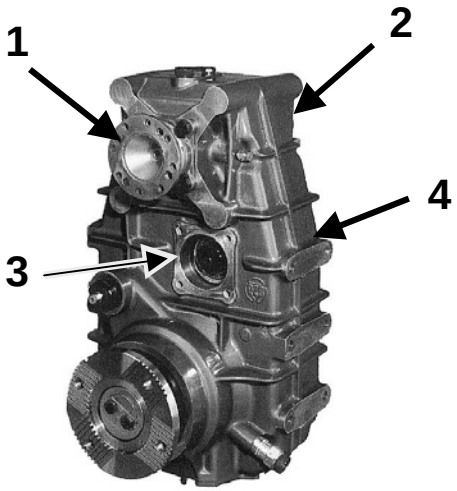
SSV4 = 857 lb.ft. (118 Kgm) max total combined for each output shaft (1&2 Only) at 1500 RPM

Two - one to front, one to rear- independently shiftable PTO's for hydraulic pumps or prop-shaft drive.
Two auxiliary outputs for lube pump or light pump applications on SSV2 only.

Auxiliary power available with the vehicle in motion.

Drive connection to rear axle independent of PTO operation.

Optional switch for warning light when main drive is disconnected. (Order TG-RPS-A pressure switch kit separately)



VIEW FROM REAR

PTO OUTPUT RATIO: SSV2 = 1.28:1 (at 1 & 2)
Aux = 1.25:1 (at 3 & 4)

SSV4 = 1.56:1 (at 1 & 2 Only)

PTO output rotation: same as input (at 1 & 2)
opposite input (at 3 & 4)

Max Output Shaft Speed: Standard Unit 2,500 RPM
With lube kit 3,700 RPM

Base Unit Weight: SSV*-14 = 251 lbs. (114Kg) SSV*-21 = 255 lbs. (116Kg)
Optional Mounting Kit 2991070000 (2 required) Optional Lube Pump 2054150000 (SSV2 Only)(#3 Only)

SS V2 - 14 X5 - A X X X X X

SS: Split Shaft

Series
V2 - 1.28:1 ratio out
V4 - 1.56:1 ratio out

Through Torque Rating:
14 = 14,400 lb.ft.
21 = 21,600 lb.ft.

Main Shaft Thru Flanges:
X5 = 1550/1610/1710/1810 (14 Only)
XC = 1610/1710/1810 (21Only)

Main Shaft & Output Shift Options:
A - Manual Air 12V
E - Electric Air 12V

Special Features:
X - None

Output Shaft Options:

Output #4 - Forward
X -Opening Covered

Output #3 - Rear
X -Opening Covered
L - Lube Pump (SSV2 Only)

Output #2 - Forward
(Same Options as Below)

Output #1 - Rear
X - Opening Covered
C - 1410 Comp. Flng.
D - 1550 Comp. Flng.
E - SAE "C" Hyd. Mntg.
F - SAE "CC" Hyd. Mtg.
H - SAE "D" Hyd. Mntg.
I - DIN 5462 Hyd. Mntg. (129015030000 Gasket recommended, not included)
K - SAE "B" Hyd. Mntg.
P - SAE "B-B" Hyd. Mntg.

Muncie Power Products, Inc.

Work Sheet SSV2 SERIES

		Model	Thru Flange Option	Shift Option	Output L.S. #1 - Rear	Output R.S. #2 - Rear	Output L.S. #3 - Forward	Output R.S. #4 - Forward	Special Feature		
FILL IN YOUR OPTIONS:											
EXAMPLE:		SSV2-14	X5	- A	X	X	X	X	X		Bill Of Materials
SSV2-14 SSV4-14 SSV2-21 SSV4-21	3290300000 3290500000 3290400000 3290600000									QTY 1	_____
X5 (SSV2or4-14 only) XC (SSH2or4-21 only)	2053500000 2054050000									2	_____
A E	48TK4428 48TK4429(1 REQ. for ea. output kit) 48TK4430 48TK4431(1 REQ. for ea. output kit)									1 # Or 1 #	_____ _____ _____ _____
X - Opening Covered C - 1410 Comp. Flng. D - 1550 Comp. Flng. E - SAE "C" Hyd. Mntg. F - SAE "CC" Hyd. Mtg. H - SAE "D" Hyd. Mntg. K - SAE "B" Hyd. Mntg. I - DIN 5462 P - SAE "B-B" Hyd. Mntg.	None 2053490000 2053640000 2054260000 2054270000 2054280000 3520510000B STANDARD 3520520000B									1	_____
X - Opening Covered C - 1410 Comp. Flng. D - 1550 Comp. Flng. E - SAE "C" Hyd. Mntg. F - SAE "CC" Hyd. Mtg. H - SAE "D" Hyd. Mntg. K - SAE "B" Hyd. Mntg. I - DIN 5462 P - SAE "B-B" Hyd. Mntg.	None 2053490000 2053640000 2054260000 2054270000 2054280000 3520510000B STANDARD 3520520000B									1	_____
L - Lube Pump (on Rear) (SSV2 Only) (Only 1 Req.)	2054150000									1	_____
X – None	None										
X - None	None										
MOUNTING KIT	2991070000									2	2991070000

SSH2 and SSV* SERIES SPLIT SHAFT GENERAL SPECIFICATIONS

Compact design:

- Reduced length for easy fit in short wheelbase trucks.
- SSH2 offers reduced height for maximum space availability for the bodywork and other equipment. The SSH2 fits below the frame rails.

Lightweight:

SSH2-14 227 lbs. (103 Kg) without flanges SSH2-21 234 lbs. (106 Kg) without flanges.

SSV*-14 251 lbs. (114 Kg) without flanges SSV*-21 255 lbs. (116 Kg) without flanges.

PTO outputs:

- Popular hydraulic pump flanges and drive flanges for standard driveshafts to remote driven equipment.
- Converting output configurations is possible without dismantling the unit.
- Provision for indicator switch to indicate engagement/disengagement of the drive to the rear axle. Order switch Kits Separately.

Main shaft flanges:

- Companion flanges are available to suit the drive shafts of all popular vehicles.

SHIFTING MECHANISM

Main shaft:

- Vehicle drive engagement/disengagement is controlled by a double acting air cylinder. Current position is retained when air pressure is discontinued.
- For added safety a mechanical detent ensures that the drive to the rear axle will not be disconnected if air pressure is lost.

PTO output shafts:

- Four (SSH2) and Two (SSV*) power take-off outputs available, each independently controlled by a single acting air cylinder.

LUBRICATION

- Splash type: only 4.75 qt. (4.5 kg) oil required for optimum lubrication of all components.
- Dry sump lubrication available on SSV2 for high speed operation (over 2500 output shaft speed.)
- Filler breather, drain and level plugs are readily accessible to allow for easy oil servicing. Magnetic drain plugs retain metallic impurities.

CONSTRUCTION

- Strong, compact cast iron housing. One piece construction with only one aperture for maximum (structural) sturdiness. Housing surface is ribbed for improved strength and heat dissipation.
- Main transmission shafts manufactured in forged alloy steel and case hardened.
- Teeth of spur gears are made of alloy forged steel, and case hardened. Gears are profile ground to provide quiet operation.
- The main shafts are supported by heavy duty ball bearings.
- Tapered roller bearings support the PTO output shafts.

SPECIFICATIONS

Throughput torque:

- 14,400 lb.ft. (2000 Kgm) for SSH2-14 and SSV*-14
- 21,600 lb.ft. (3000 Kgm) for SSH2-21 and SSV*-21

Calculating Throughput Torque: Multiply Max engine torque by the deepest transmission ratio.

Example:

Freightliner FLD-112 Conventional

Engine = Caterpillar C-10; 10.3L Diesel Engine; 305GHP @ 1800 RPM; 1050 FtLb @ 1200 RPM

Transmission = Fuller RT-11609A 9 Speed Direct

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Rev Lo	Rev Hi
12.65	8.38	6.22	4.57	3.40	2.46	1.83	1.34	1.00	13.22	3.89

Through Torque = 1050 FtLb X 13.22 Ratio = 13,881 FtLb

Max output torque:

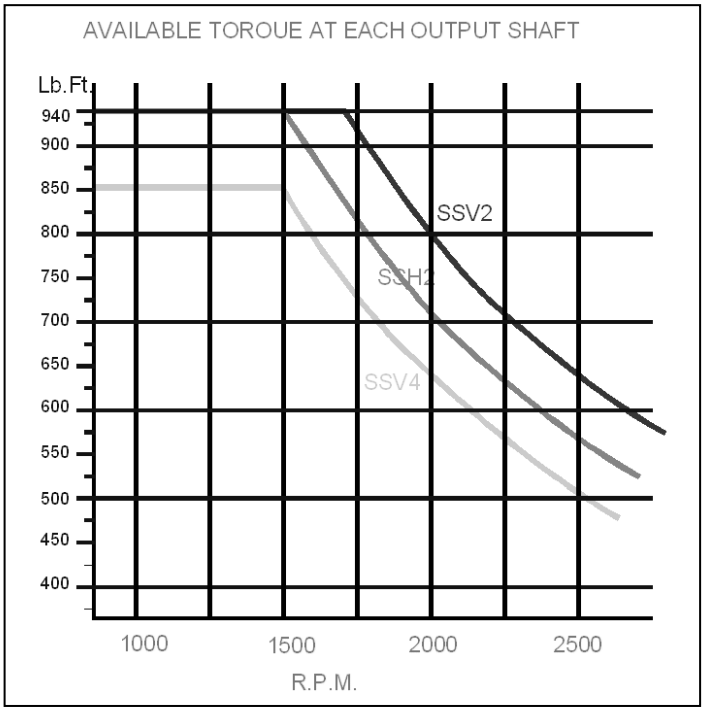
- SSH2 = 940 lb.ft. (130 Kgm) max total combined for each output shaft @1500 RPM. (Companion flange drives not to exceed drive shaft ratings.)
- SSV2 = 940 lb.ft. (130 Kgm) max total combined for each output shaft @1500 RPM. (Companion flange drives not to exceed drive shaft ratings.) (excluding intermediate shafts)
- SSV4 = 857 lb.ft. (118 Kgm) each shaft @1500 RPM (Companion flange drives not to exceed drive shaft ratings.)

PTO ratio:

- SSH2 and SSV2 = 1.28:1 output/input
- SSV4 = 1.56:1 output/input

Rotation:

- SSH2 - opposite input
- SSV2 & SSV4 - same as input (intermediate shaft rotation is opposite input)



SPLIT-SHAFT INSTALLATION

SPLIT-SHAFT UNIT POSITIONING

The Muncie split-shaft unit should be located between the gearbox and the rear axle, as near as possible to the transmission output flange. If possible locate the split-shaft unit in place of the midship bearing. Elastic suspension elements should always be fitted between the split-shaft and the truck chassis. Suitable suspension kits are available to facilitate the installation of the split-shaft unit. Direct mounting of large pumps may require additional support to balance the assembly on the elastic suspension elements.

MOUNTING THE SPLIT-SHAFT UNIT TO THE TRUCK FRAME

Welding to frame or cross members is not allowed. All brackets should be fastened to the truck frame using bolts. Existing holes should be used. Additional holes should only be made with the approval of the truck manufacturer.

DRIVE SHAFTS

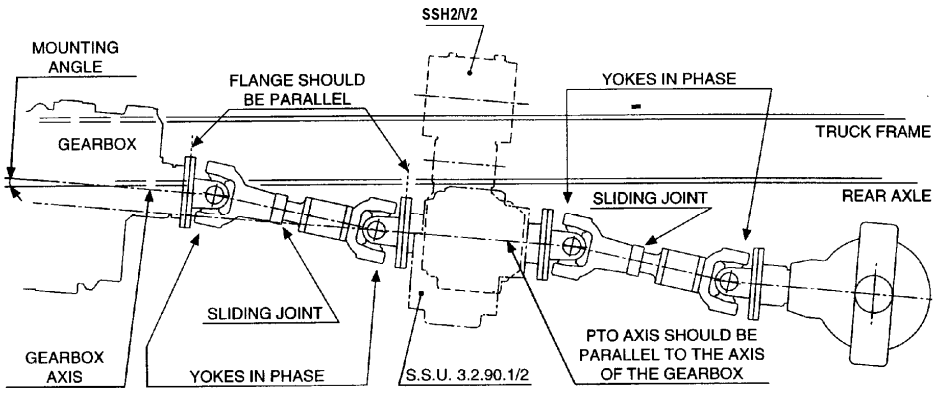
Contact your local Driveline shop for driveshafts and driveshaft alterations. All shafts used in the vehicle's drive line should be the same size and quality as the original. The same applies to flanges, bolts, and nuts. Self locking nuts should never be re-used, but should be replaced by new ones.

Balance

All drive shafts should be statically and dynamically balanced.

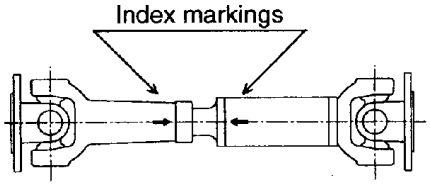
Angles

To prevent vibration and noise during operation all drive flanges must be parallel. Therefore it is necessary to incline the split-shaft unit and all other driven equipment at the same angle to the truck frame as the transmission. This angle varies with the truck model. Information should be obtained from the truck manufacturer.



Phase

Drivelines with slip joints should be used. Make sure that compensation is allowed for length changes. When assembling make sure that all U-joints are correctly phased by ensuring that index markings are correctly aligned.

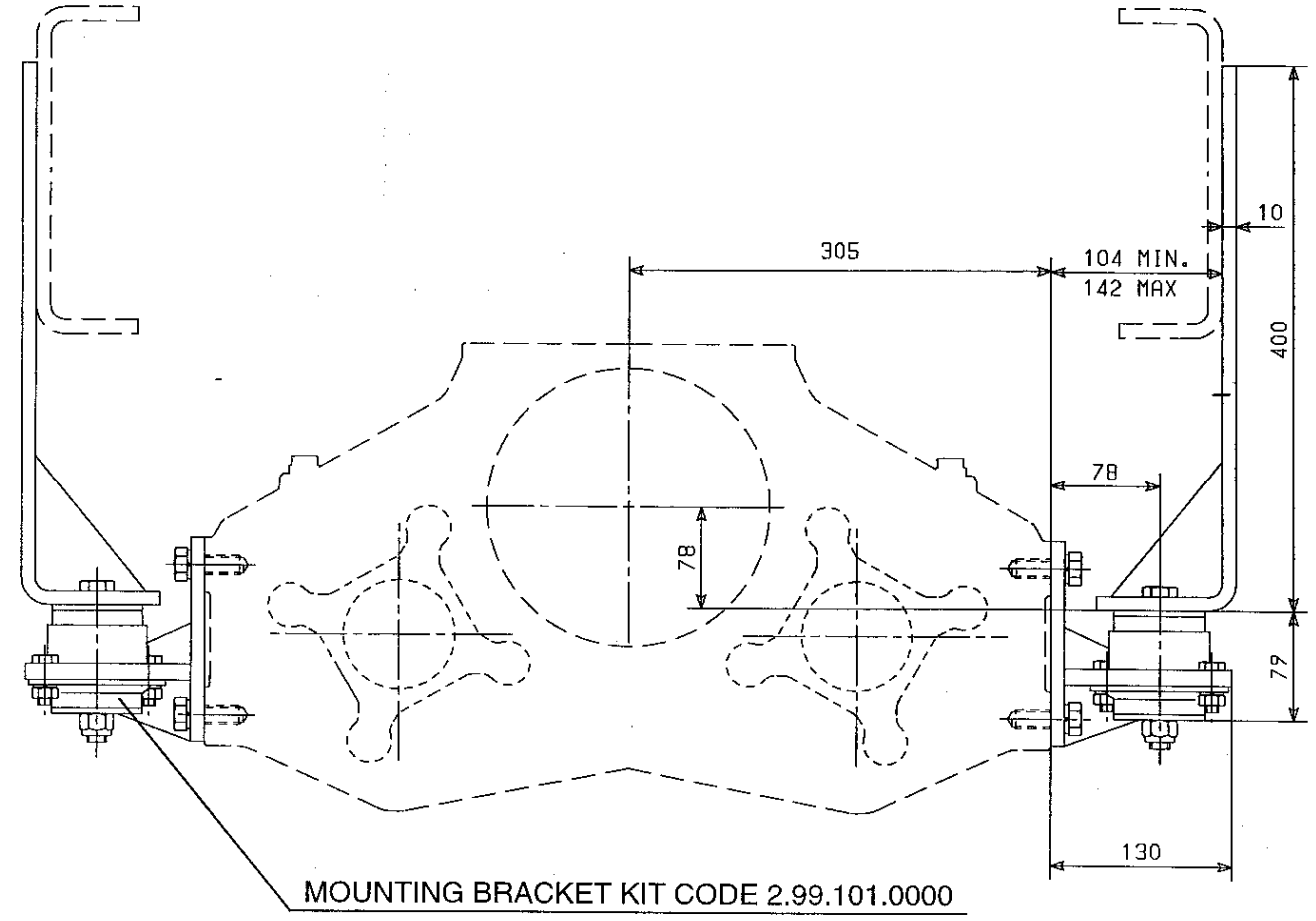


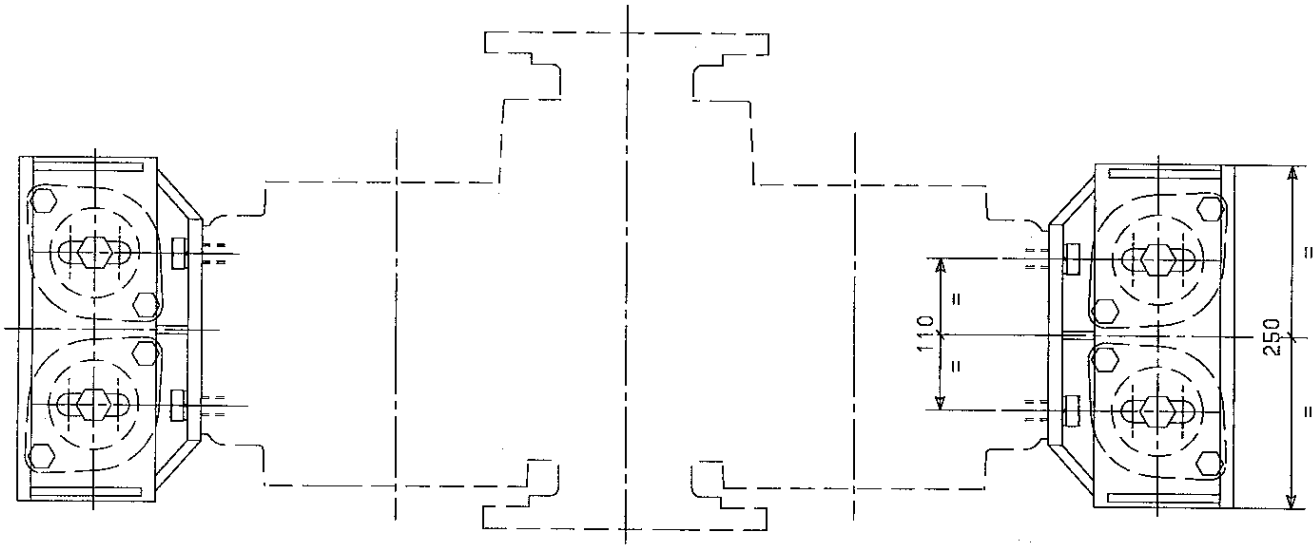
Protection

For safety reasons it is highly recommended to provide all accessible drivelines with protection covers.

MOUNTING SSH2 SERIES

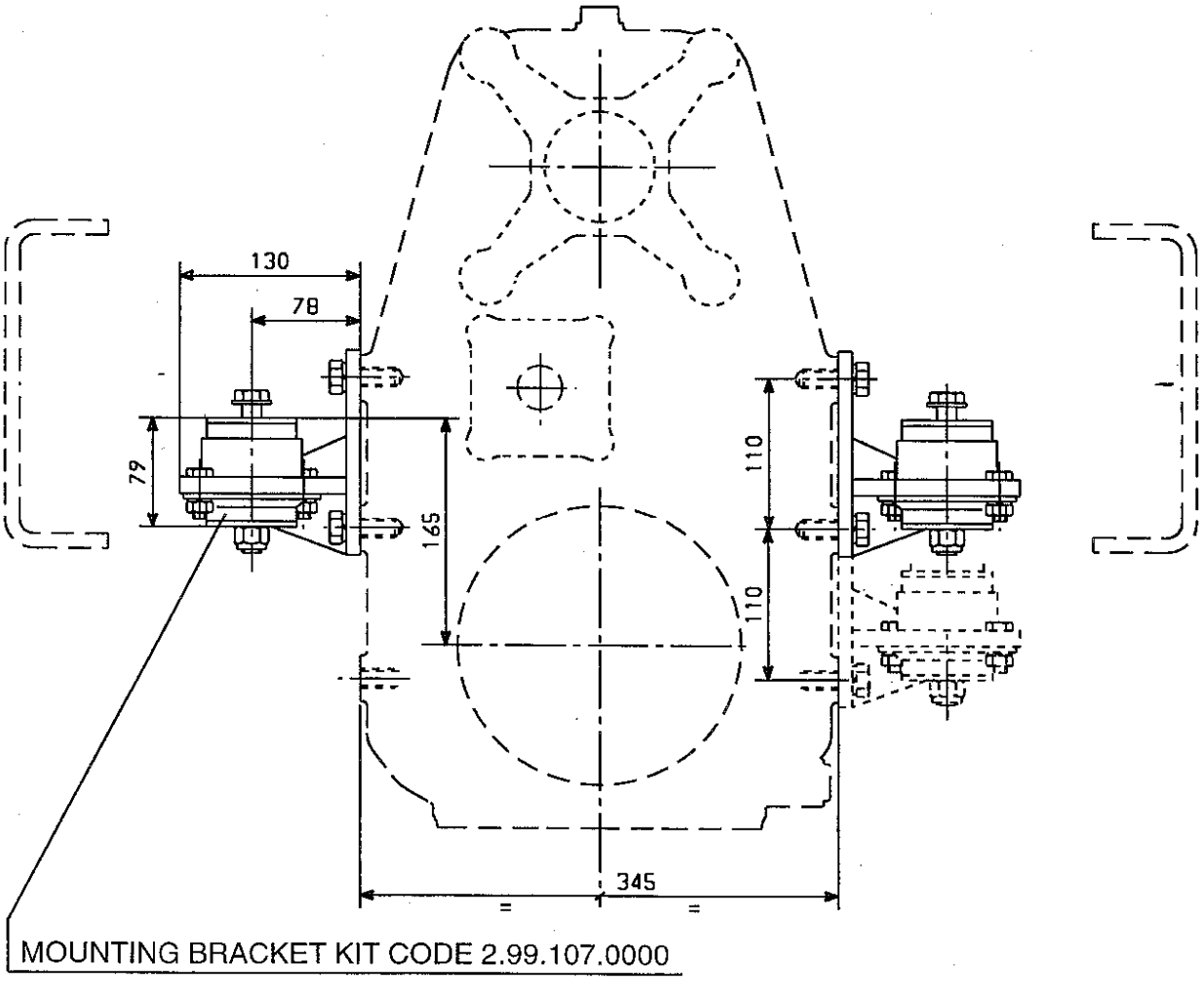
Mounting Bracket 2991010000 2 pcs. Required.



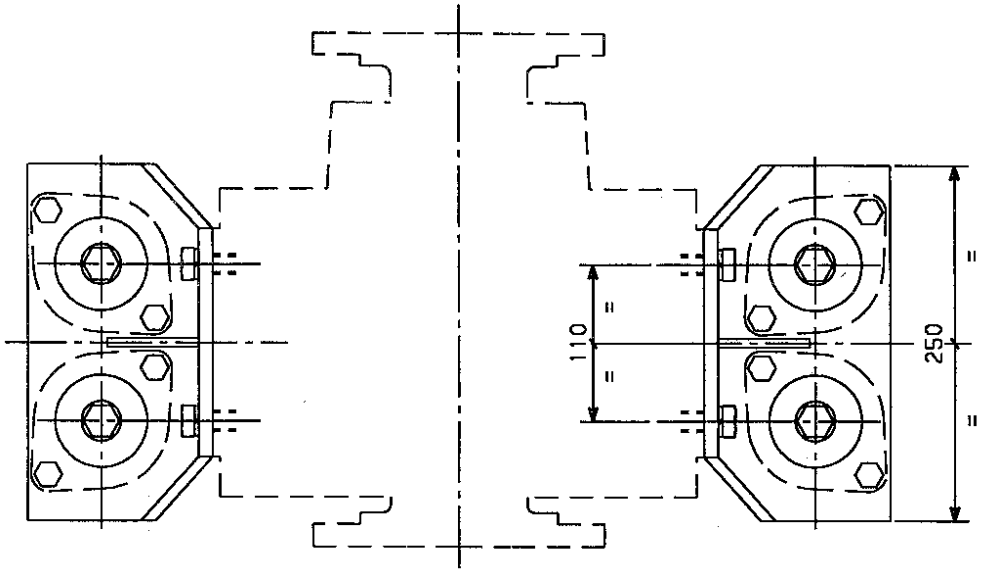


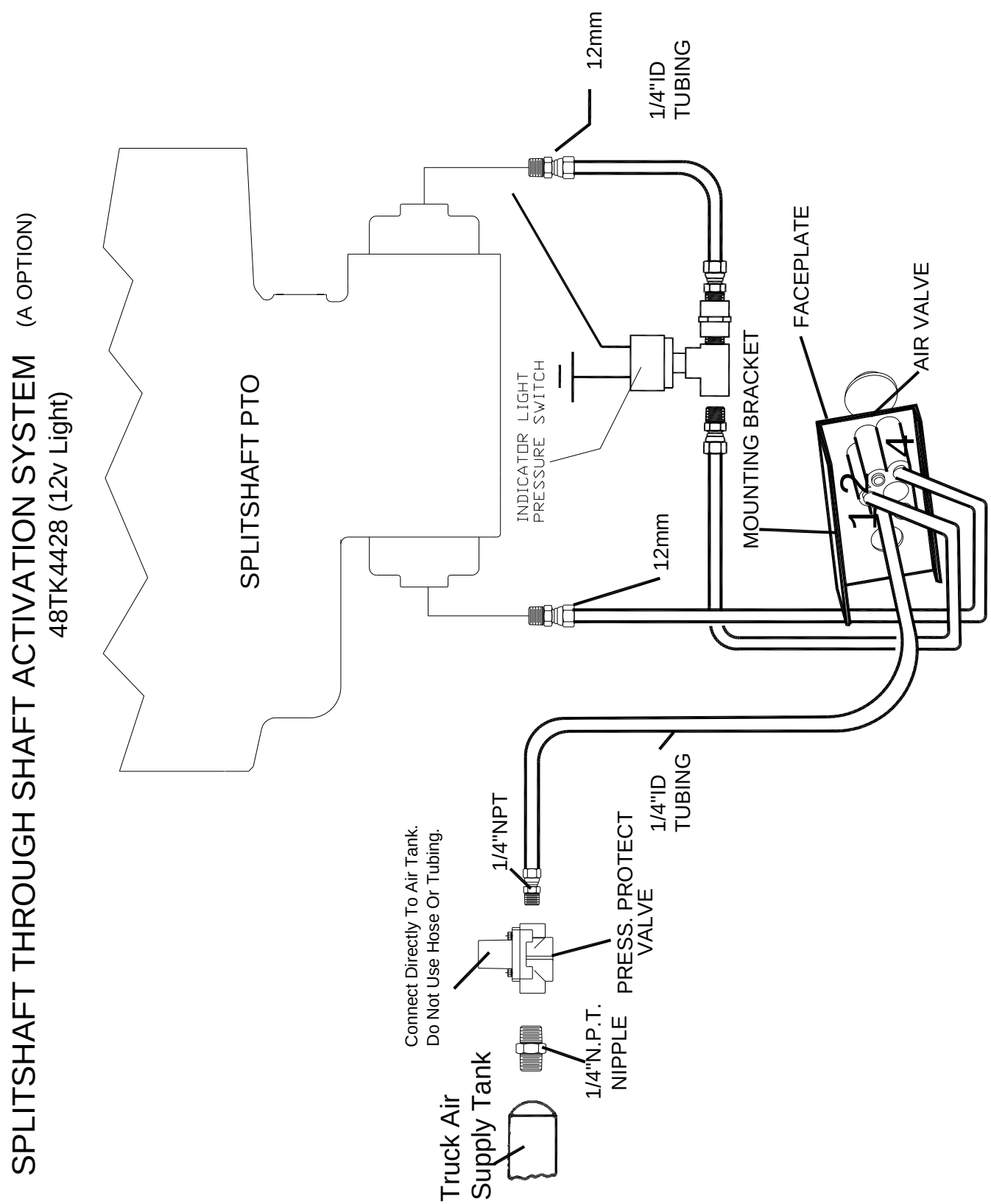
MOUNTING SSV* SERIES

Mounting Bracket 2991010000 2 pcs. Required.



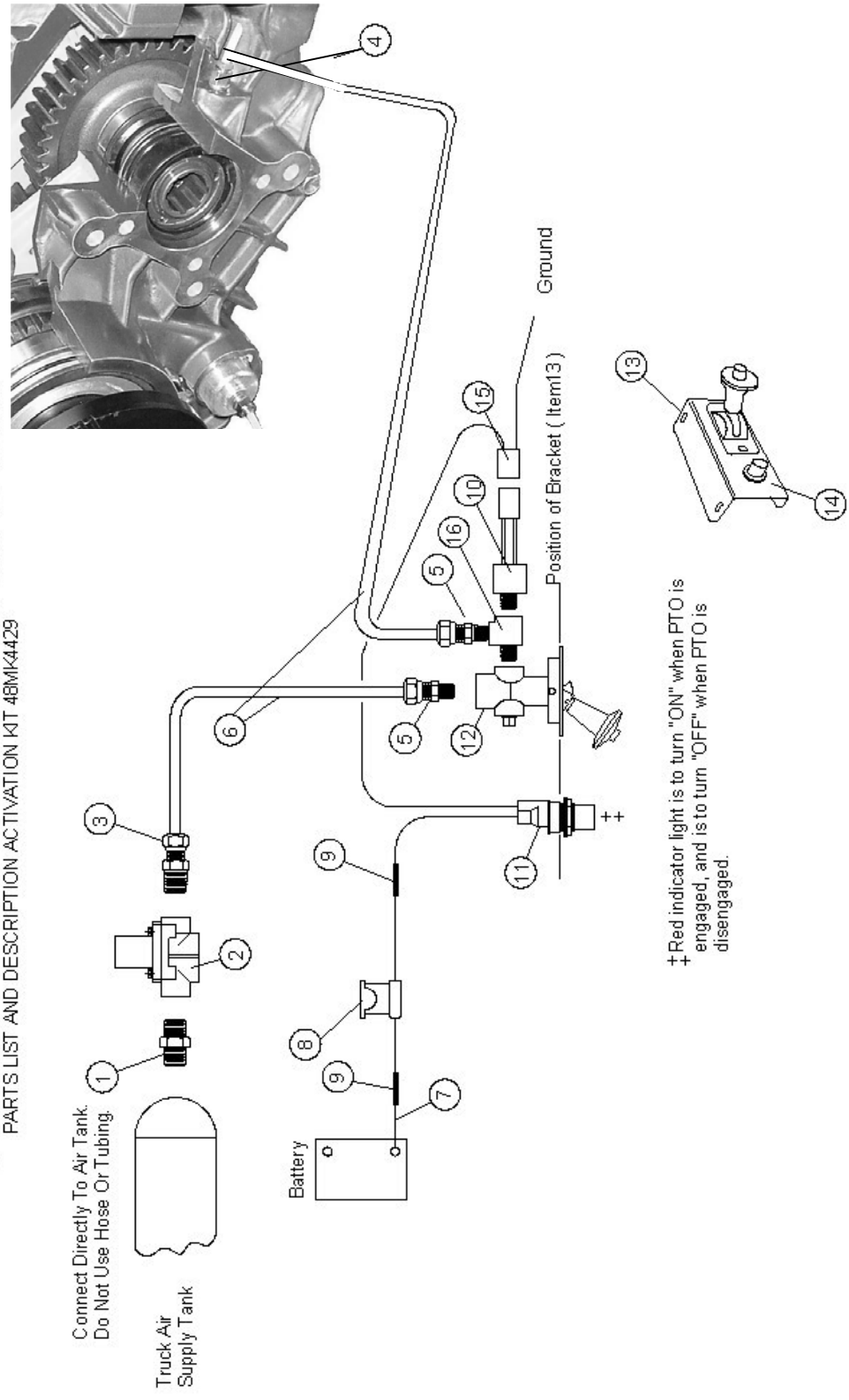
MOUNTING BRACKET KIT CODE 2.99.107.0000




SPLITSHAFT THROUGH SHAFT ACTIVATION SYSTEM (A OPTION)
48TK4428 (12v Light)
SPLITSHAFT PTO
12mm
1/4"ID TUBING
INDICATOR LIGHT PRESSURE SWITCH
12mm
MOUNTING BRACKET
FACEPLATE
AIR VALVE
1/4"NPT
1/4"ID TUBING
Connect Directly To Air Tank. Do Not Use Hose Or Tubing.
PRESS. PROTECT VALVE
1/4"N.P.T. NIPPLE
Truck Air Supply Tank

SPLITSHAFT PTO OUTPUT STANDARD AIR SHIFT SYSTEM

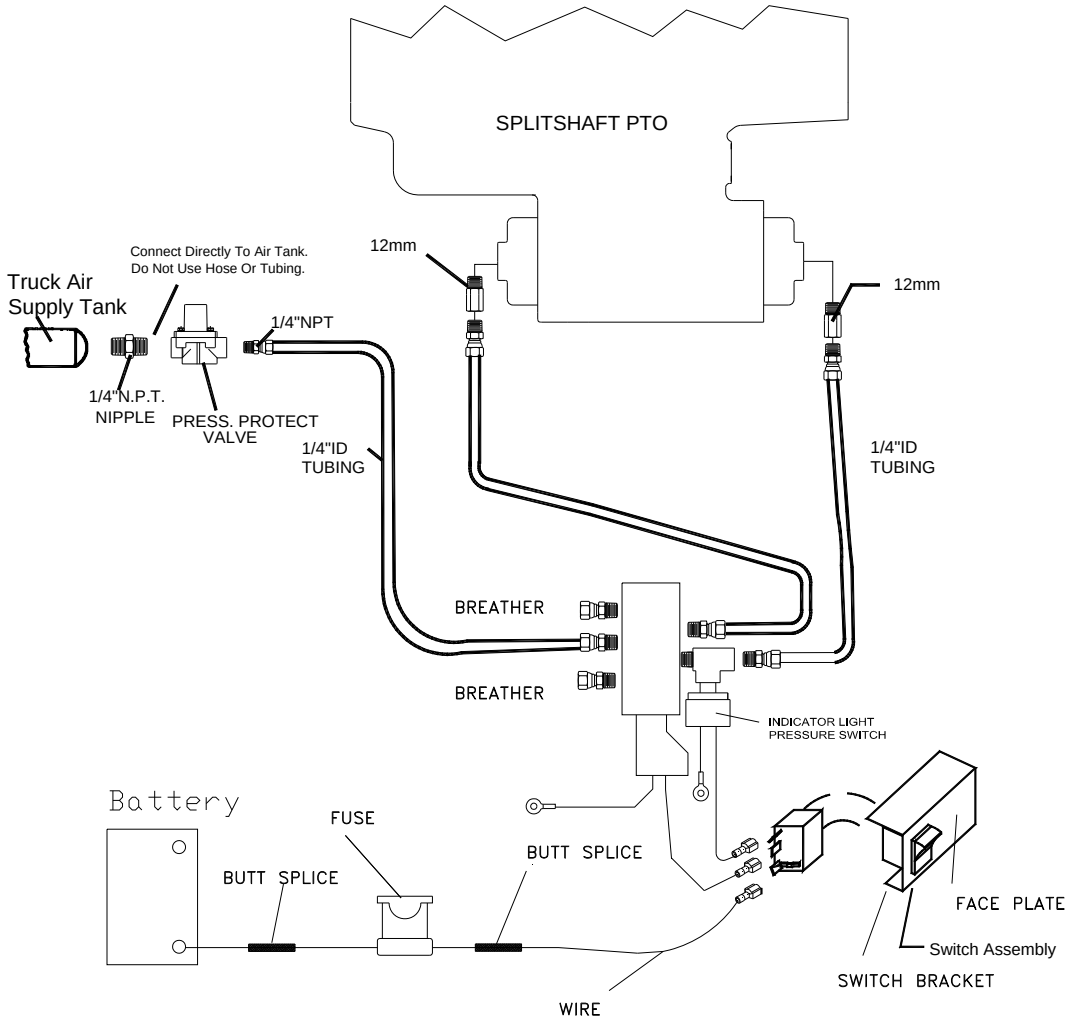
PARTS LIST AND DESCRIPTION KIT 48MK4429



Muncie Power Products®

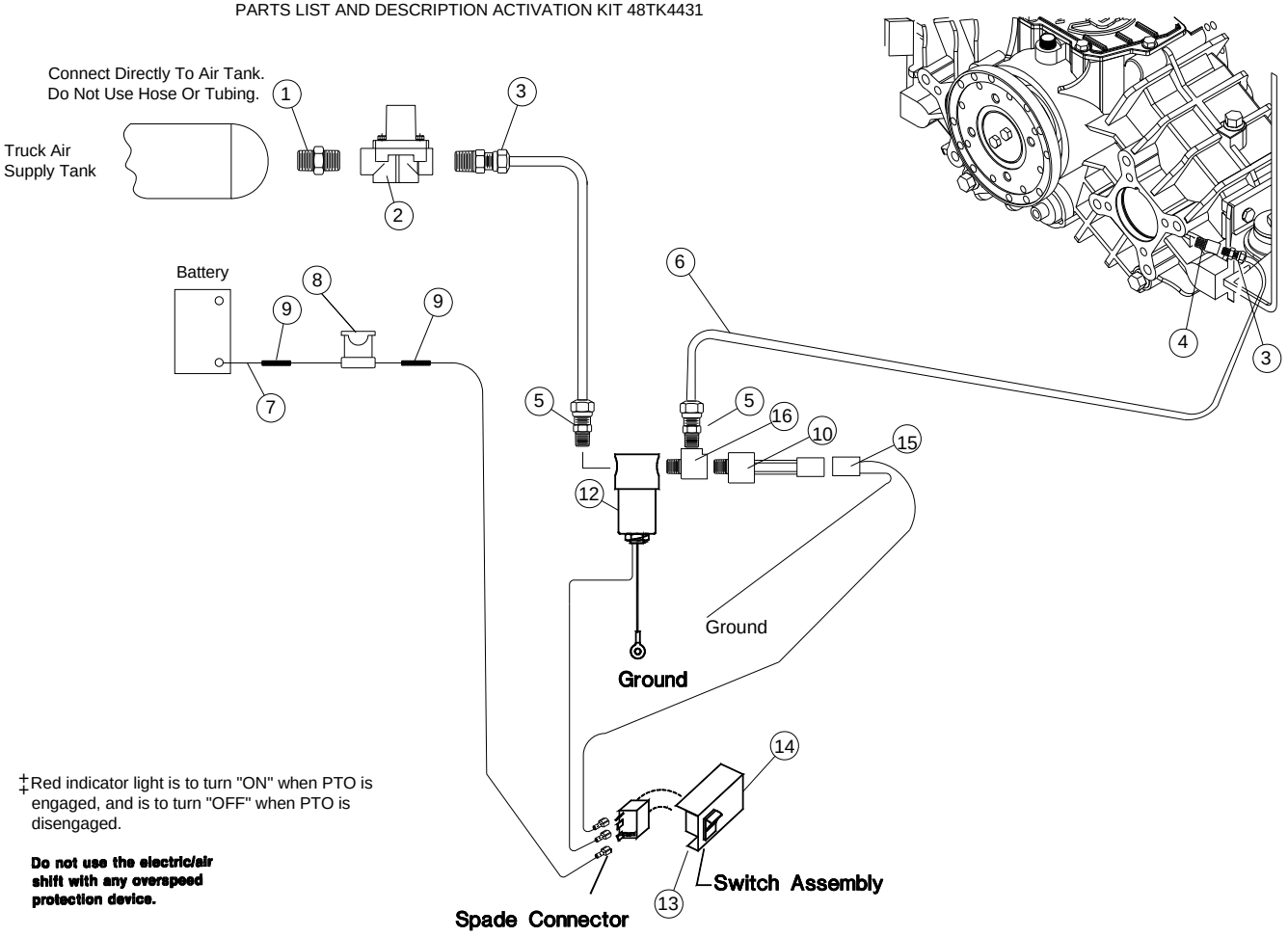
SPLITSHAFT THROUGH SHAFT ACTIVATION SYSTEM (E OPTION)

48TK4430A (12v Light)



SPLITSHAFT PTO OUTPUT ELECTRIC/AIR SHIFT SYSTEM

PARTS LIST AND DESCRIPTION ACTIVATION KIT 48TK4431



‡Red indicator light is to turn "ON" when PTO is engaged, and is to turn "OFF" when PTO is disengaged.

Do not use the electric/air shift with any overspeed protection device.

ITEM	QTY	PART NO	DESCRIPTION
1	1	44MB2164	Pipe Nipple
2	1	31M15759	Pressure Protection Valve
3	2	44MB6844	Tube Fitting
4	1	44T38629	Adapter 1/8" BSPT
5	2	44MB6842	Tube Fitting
6	1	45M44430	Air Tubing - 30 ft
7	30	37M18000	Electric Wire - 30 ft
8	1	33T36299	Fuse Assembly
9	3	34M18002	Butt Splice
10	1	30T37954	Pressure Switch
11	1	32M12001	Light Assembly 12v
12	1	35M18653	Air Valve
13	1	36MA1004	Dash Bracket
14	1	36M01005	Face Plate
15	1	34T36941	Wiring Pigtail
16	1	44MB2252	Street Tee
NS	1	36MK1007	Bolt Kit - Dash Bracket

ENGAGING THE SPLIT SHAFT (MANUAL TRANSMISSION)

1. Stop the vehicle and put the transmission in neutral.
2. Apply the parking brake and block wheels (if the unit is to operate while the vehicle is stationary).
3. For stationary operation: Shift the main shaft air control (double acting) to disconnect the drive to the rear axle.
4. With the engine at idle, engage the required PTO output(s) by operating the relevant air control(s).
5. Depress the clutch pedal and select the required gear. The output shaft speeds are dependent on the main transmission gear selection. Use caution if placing the transmission into reverse as it may cause damage to the driven component(s).
6. Slowly release the clutch pedal. If Split Shaft is not disengaged from the rear axle, release parking brake to allow vehicle to be driven at application rate.
7. For stationary operation: Set the engine speed to the required R.P.M.

DISENGAGING THE SPLIT SHAFT

1. Return the engine speed to idle.
2. Depress the clutch pedal and place the transmission in neutral.
3. Set the parking brake if vehicle has been used in mobile application.
4. Disengage the PTO output(s) by operating the relevant air control(s).
5. Shift the main air control (double acting) to re-engage the drive to the rear axle.
6. Remove the wheel blocks, if stationary application.
7. All PTO outputs are now disengaged. The vehicle can be driven as normal.

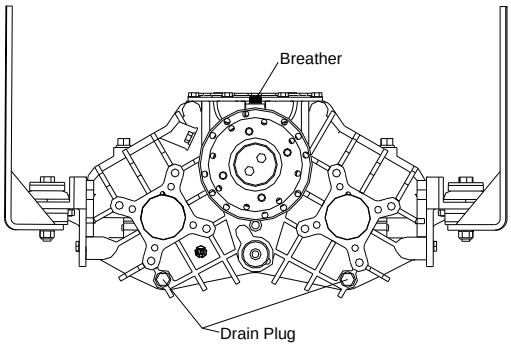
ENGAGING THE SPLIT SHAFT (AUTOMATIC TRANSMISSION)

1. Stop the vehicle and put the transmission in neutral.
2. Apply the parking brake and block wheels (if the unit is to operate while the vehicle is stationary).
3. For stationary operation: Shift the main shaft air control (double acting) to disconnect the drive to the rear axle.
4. Engage the required PTO output(s) by operating the relevant air control(s).
5. Shift transmission into the required gear selection. Use caution if placing the transmission into reverse as it may cause damage to the driven component(s).
6. Stationary application: Using a method specified by the transmission manufacturer, shift transmission into direct drive.
   Mobile application: If Split Shaft is not disengaged from the rear axle, release parking brake to allow vehicle to be driven at application rate.
7. For stationary operation: Set the engine speed to the required R.P.M.

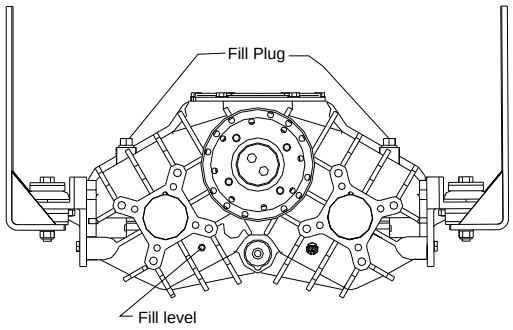
DISENGAGING THE SPLIT SHAFT

1. Be sure vehicle is stopped and apply parking brake.
2. Shut off the engine with transmission in drive mode.
3. Set the parking brake if vehicle has been used in mobile application.
4. Disengage the PTO output(s) by operating the relevant air control(s).
5. Shift transmission into neutral.
6. Remove the wheel blocks.
7. Restart the engine.
8. Shift the main air control (double acting) to re-engage the drive to the rear axle.
9. All PTO outputs are now disengaged. The vehicle can be driven as normal.

Failure to follow proper shifting or operating sequences will result in premature PTO failure with possible damage to the equipment.



VIEW FROM REAR

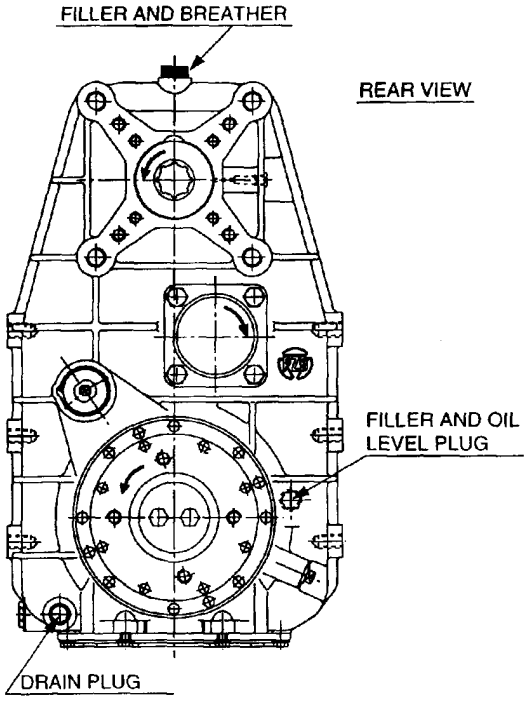


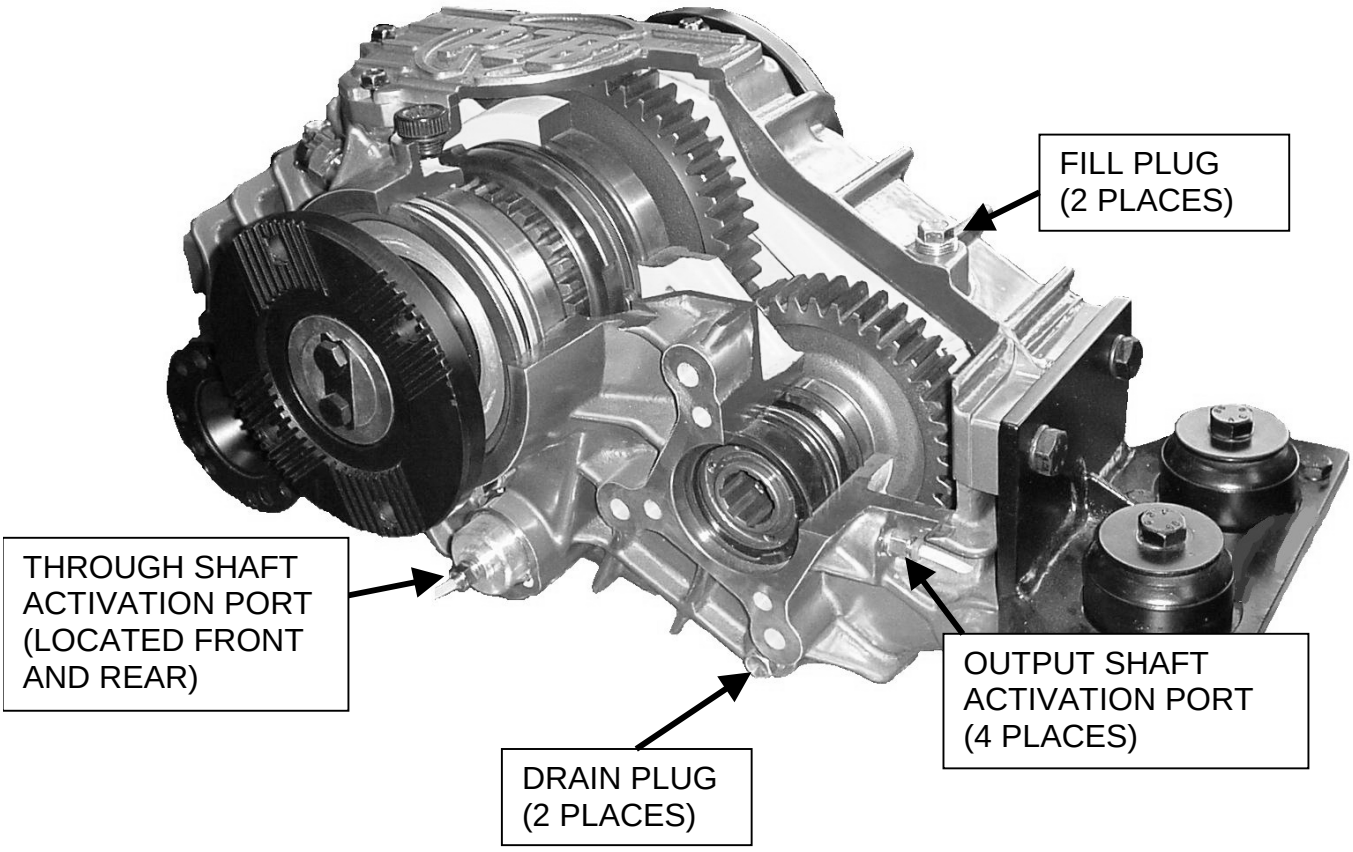
VIEW FROM FRONT

OIL SERVICE

1. Split shaft unit must be filed with oil up to oil level plug before use.
2. The oil level must be checked regularly. A minimum of every two weeks of vehicle operation is recommended.
3. The oil must be changed every 2000 working hours (application operation.)
4. Remove the bottom drain plugs (left and right hand side SSH2) to ensure old oil is completely drained from the split shaft unit.
5. Clean metal particles from the magnetic drain plugs before replacing.
6. To refill unit pour oil through one of the uppermost filler plugs (or breather) until it reaches the oil level plug.
7. Use SAE 90 EP gearbox oil.

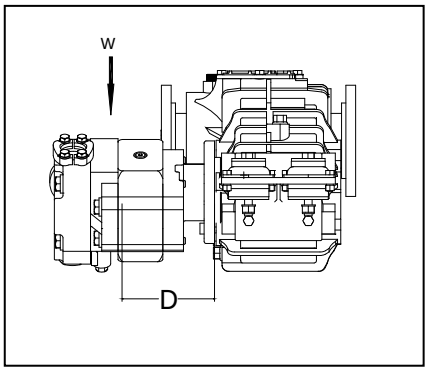
For the Horizontal Splitshaft , the nominal oil capacity is 2.6 qts. (2.5 liters).
For the Vertical Splitshaft, the nominal oil capacity is 4.75 qts. (4.5L) standard, and 2.1 qts (2L) with oil cooling kit.





DIRECT MOUNT PUMP WIEGHT LIMITS WITHOUT SUPPORT

The direct mount pump limit is found by weighing the pump and measuring the distance from the mounting pad to the center of gravity of the pump.



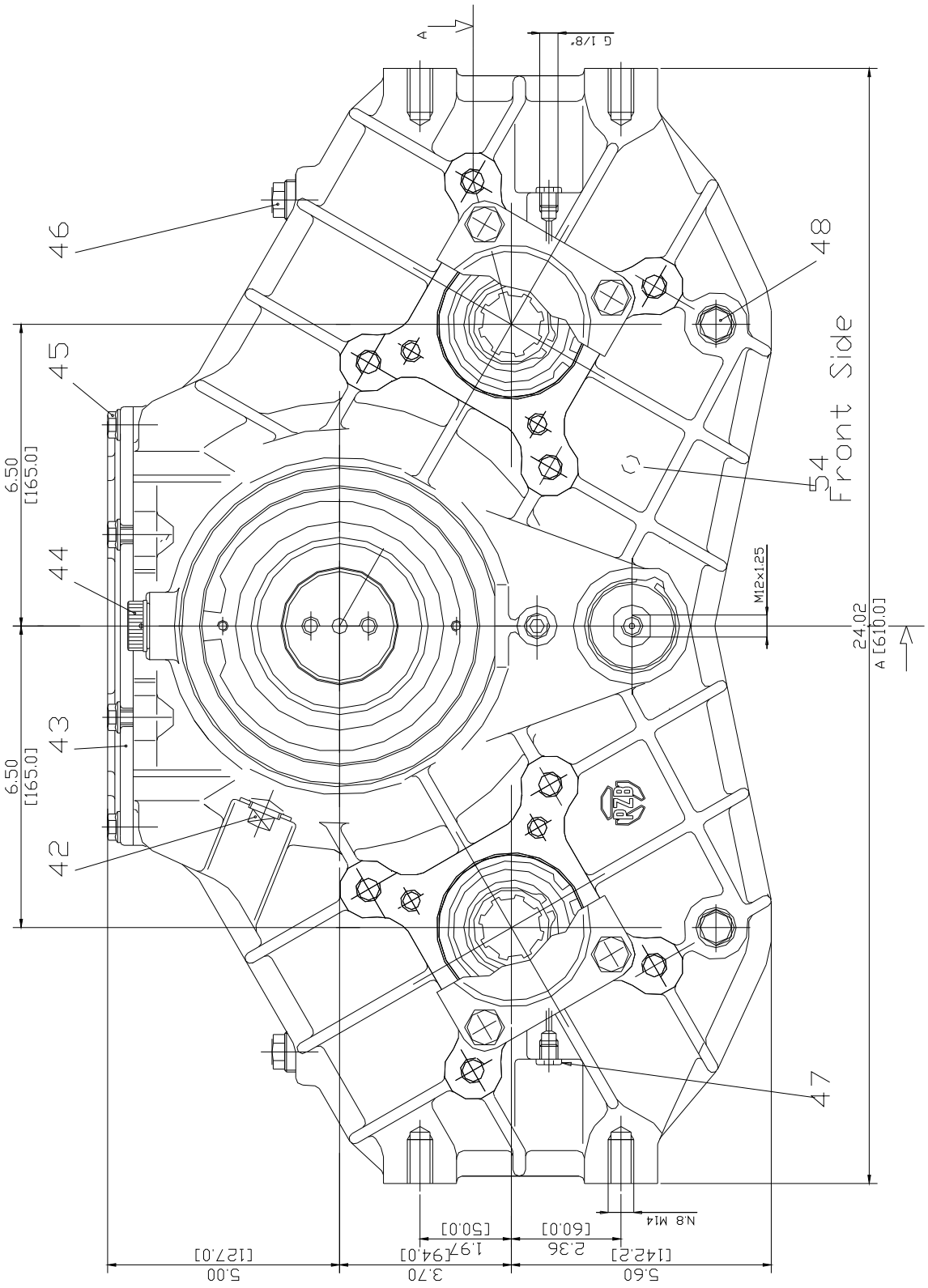
D = ft

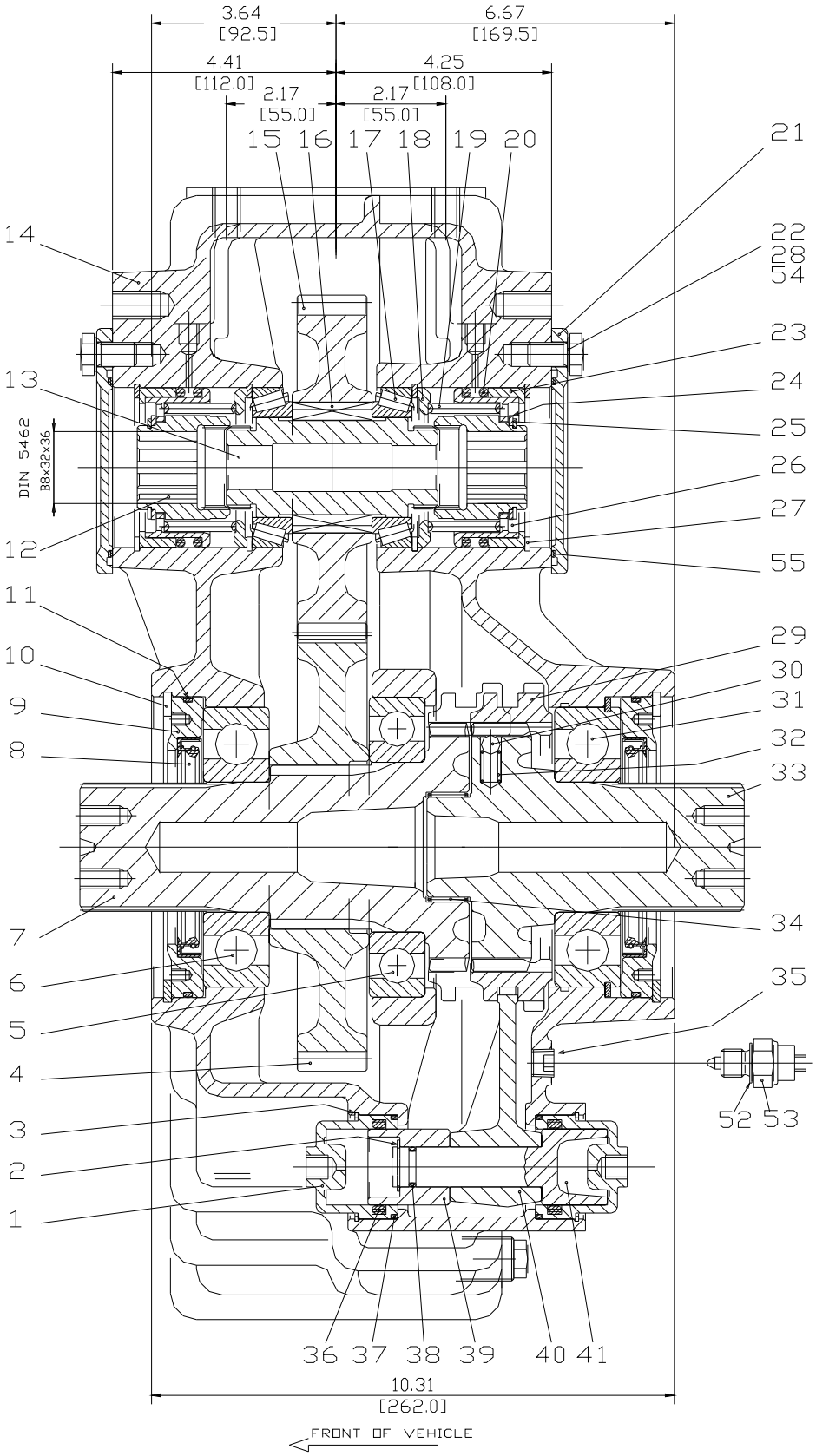
W = lb

L = D x W

The limit is 37 ft.lb. (50Nm)

SSH2-14 SPLIT SHAFT PTO

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4.41
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4.25
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2.17
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2.17
[55.0]
15 16 17 18 19 20
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52 53
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12
11
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9
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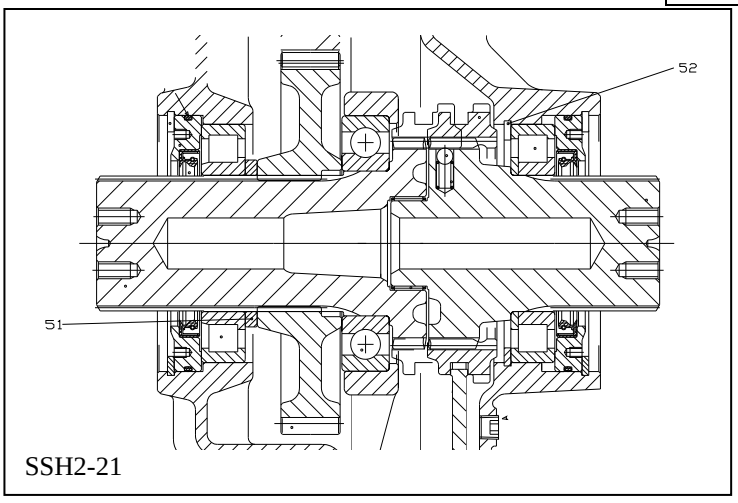
6
5
4
3
2
1
DIN 5462
B8x32x36
36 37 38 39 40 41
10.31
[262.0]
FRONT OF VEHICLE

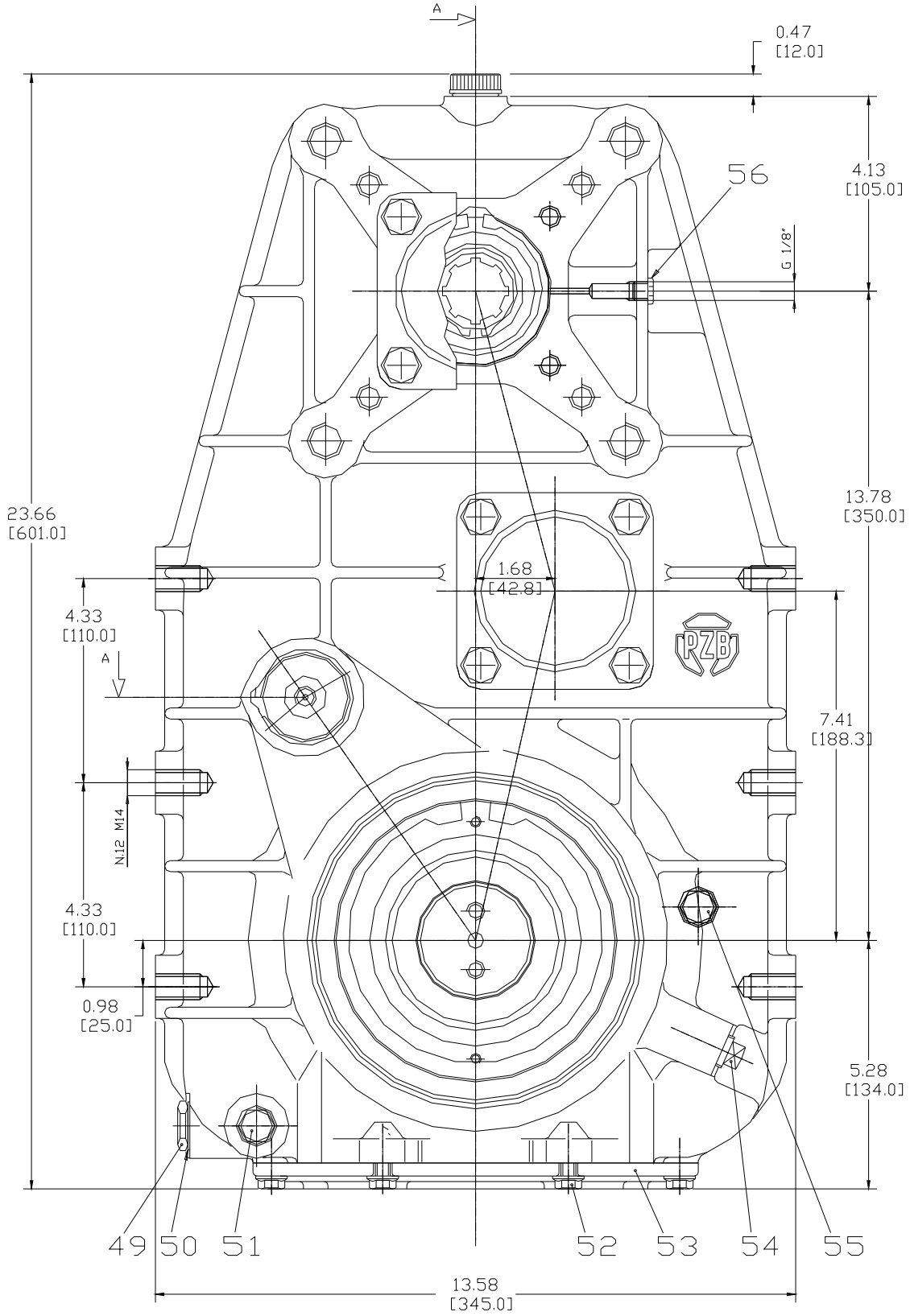
SERVICE PARTS SSH2

1	1080100100	Cylinder	2
2	0070102200	Snap Ring	1
3	0070500200	Snap Ring	2
4	1110310700 1110310900	Gear 50T (SSH2-14) Gear 50T (SSH2-21)	1
5	0100104200	Bearing	1
6	0100104000 0100302100	Bearing (SSH2-14) Bearing (SSH2-21)	1
7	1130115100 1130116100	Shaft (SSH2-14) Shaft (SSH2-21)	1
8	0080109100	Seal 90x110x12	2
9	1270212200	Ring	2
10	0070204600	Snap Ring	2
11	0080214000	O Ring	2
12	1170207100	Splined sleeve	4
13	1130204000	Shaft	2
14	1010501000	Housing	1
15	1111010800	Gear 39T	2
16	0060101800	Key 14x9x40	4
17	0100502700	Bearing	4
18	1260109000	Ring	4
19	1280107500	Coil Spring	4
20	0080211900	O Ring	8
21	1240111300	Cover	4
22	0020203100	Stud m12x30	16
23	1270207900	Ring	4
24	1260108500	Spacer	4
25	0070101600	Snap Ring	4
26	1210202500	Piston	4
27	0070201200	Snap Ring	8
28	0030101900	Hex Nut M12	16
29	1170208000	Splined Sleeve	1
30	0110100200	Ball 3/8"	3
31	0100104100 0100302200	Bearing (SSH2-14) Bearing (SSH2-21)	1
32	1280100600	Coil Spring	3
33	1130115200 1130116200	Shaft (SSH2-14) Shaft (SSH2-21)	1
34	0100601700	Needle Cage 50x55x20	1
35	0120107700	Plug m14x1.5	1
36	0080213700	O Ring 6150	2
37	0080213800	O Ring 3187	2
38	0080213600	O Ring 119	1
39	1210203800	Piston	1
40	1220104400	Fork	1
41	1210103000	Piston	1
42	0120104900	Plug 18x1.5	1
43	1240109400	Cover	1
44	0120111500	Filler-Breather G 1/2"	1
45	0010107600	Capscrew M8x20	6
46	0120106500	Plug 22x1.5	2
47	0120105900	Plug G1/8"	4
48	0120100200	Plug 22x1.5 Magnet	2
50	1260112200	Spacer (SSH2-21 only)	1
51	0700204700	Snap Ring(SSH2-21 only)	1
	2053310000	On Request Switch Kit (item 52&53)	
52	0040110800	Washer 14.5 x20x.5	1
53	0990016000	Indicator Switch	1
54	0040800200	Lockwasher 12.5	16
55	1290113100	Gasket	4
56	0120111400	Plug G1/4	1

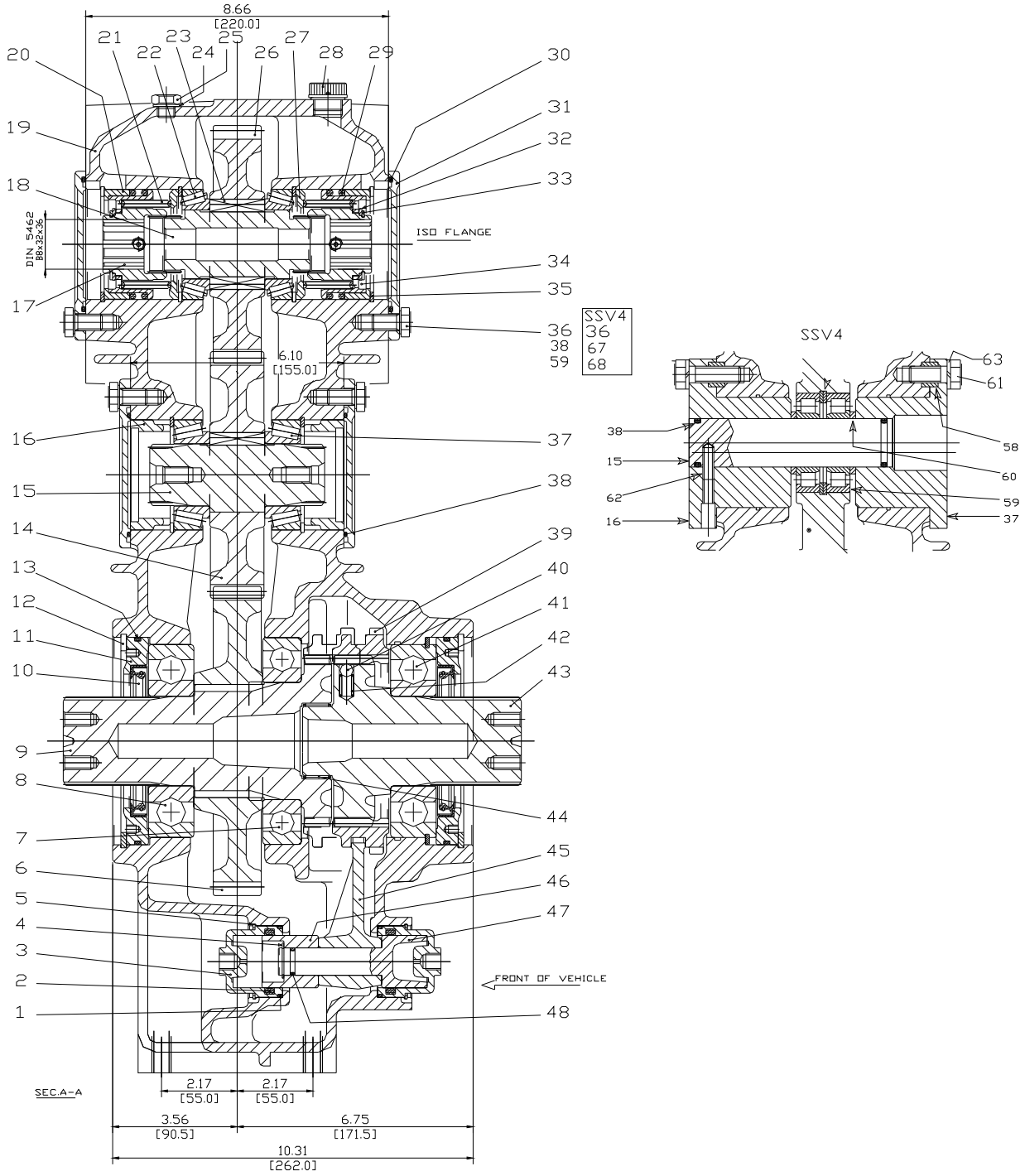


SSH2-21

SSV2-14 SPLIT SHAFT PTO



REAR VIEW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3.56
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6.75
[171.5]
10.31
[262.0]
FRONT OF VEHICLE

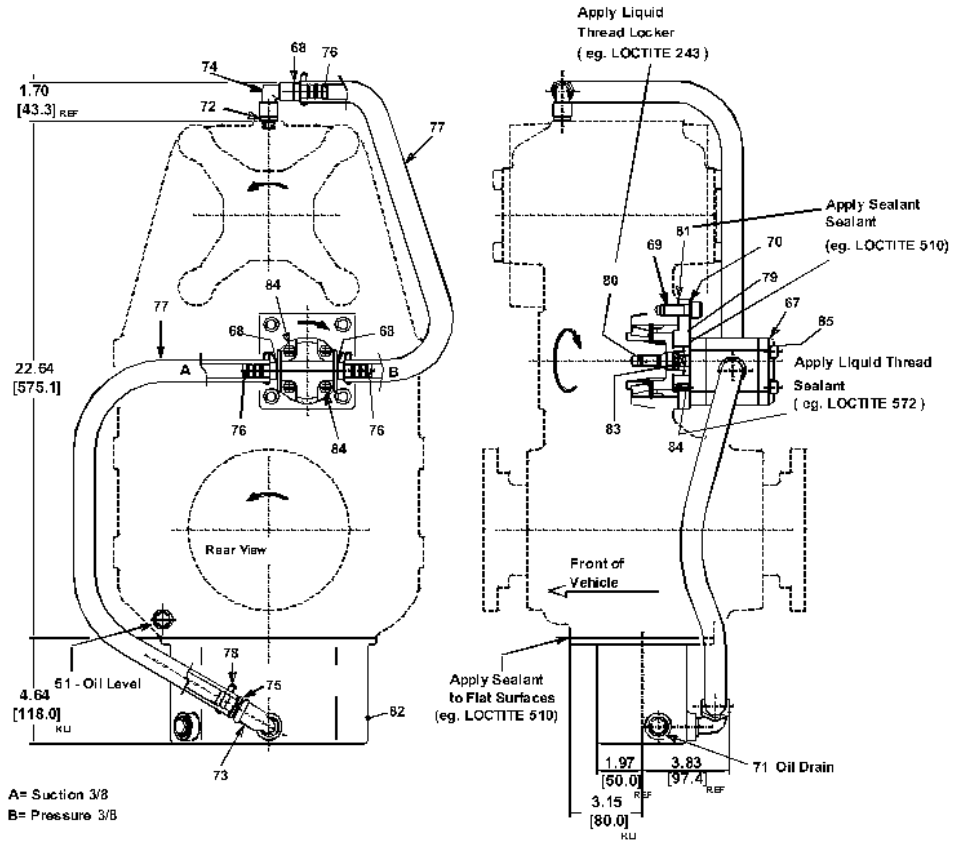
Muncie Power Products, Inc.

SSV* SERIES

ITEM	Part Number	Description	Qty.
1	0080213800	O-ring 3187(Viton)	2
2	0080213700	O-ring 6150(Viton)	2
3	1080100100	Air Cylinder	2
4	0070102200	Snap ring	1
5	0070500200	Snap ring	2
6	1110310700 1110310900	Gear 50T (SSV*-14) Gear 50T (SSV*-21)	1
7	0100104200	Bearing 6217	1
8	0100104000 0100302100	Bearing 6313 (SSV*-14) Bearing NJ 216(SSV*-21)	1
9	1130115100 1130116100	Input Shaft (SSV*-14) Input Shaft (SSV*-21)	1
10	0080109100	Shaft Seal 90x110x12	2
11	1270212200	Retaining Ring	2
12	0070204600	Snap ring	2
13	0080214000	O-ring (Viton)	2
14	1111011200 1110114800	Gear (Intermediate) 40T (SSV2) Gear 42T (SSV4)	1
15	1130204300 1140102000	Shaft (Intermediate) (SSV2) Shaft (SSV4)	1
16	1270204300	Centering Ring (SSV2)	2
16a	1250301300	Shaft Support (SSV4)	1
17	1170207100	Splined Sleeve	1
18	1130204000	Output Shaft	1
19	1010501400	Housing	1
20	1270207900	Ring	1
21	1280107500	Spring	2
22	0100502700	Bearing 32010X	2
23	0060101800	Key 14x9x40	3
24	0040107700	Washer 13.5x19x1.5	1
25	1300302900	Plug G1/4"	1
26	1111010800 1111011800	Gear (Output) 39T (SSV2) Gear 32T (SSV4)	1
27	1260113200	Ring	2
28	0120111500	Breather Plug G1/2”	1
29	0080211900	O-ring 6275(Viton)	4
30	0080216300	O-ring 3770(Viton)	4
31	1240111000	Cover	4
32	1260108500	Spacer	2
33	0070101600	Snap ring	2
34	1210202500	Piston	2
35	0070201200	Snap ring	6
36	0040800200	Lockwasher 12.5	16
37	0100502900	Bearing - Intermediate Shaft 33109(SSV2)	2
37a	1250301400	Shaft Support (SSV4)	1
38	0030101900	Hex Nut M12	16
38a	0080214200	O ring (SSV4)	2
39	1170208000	Splined Sleeve	1
40	0110100200	Ball	3
41	0100104100 0100302200	Bearing Main Shaft 6313(SSV*-14) Bearing Main Shaft 216(SSV*-21)	1
42	1280100600	Coil Spring	3
43	1130115200 1130116200	Shaft Main Output (SSV*-14) Shaft Main Output (SSV*-21)	1
44	0100601700	Needle Bearing 50x55x20	1
45	1220104400	Shift Fork	1
46	1210203800	Piston	1
47	1210103000	Piston	1
48	0080213600	O-ring 119(Viton)	1
49	0120102400	Plug G1/2”	1
50	0040103900	Washer 26x20x1	1
51	0120100200	Plug magnet	1
52	0010107600	Capscrew M8x20	6
53	1240109400	Cover	1
54	0120104900	Plug 18x1.5	1
55	0120106500	Plug 22x1.5	1
56	0120105900	Plug G1/8”	2
57	1260112200	Spacer (SSV2-21)	1
57a	0070201500	Snap Ring (SSV4)	2
58	0070204700	Snap Ring (SSV2-21)	1
58a	0990026400	Bushing (SSV4)	4
59	0020203100	Stud M12x30	16
59a	0100300600	Bearing (SSV4)	2
60	1260102000	Spacer (SSV4)	2
61	0010101000	Capscrew (SSV4)	4
62	0010500200	Capscrew (SSV4)	1
63	0040200400	Lock Washer (SSV4)	8
64	0010100500	Capscrew M12x40(SSV4)	4
65	1260112200	Spacer (SSV4-21)	1
66	0070204700	Snap Ring (SSV4-21)	1
67	0020203100	Stud M12x30 (SSV4-21)	8
68	0030101900	Hex Nut M12	8

	2054150000	LUBRICATION KIT (Optional SSV2 Only)	
ITEM	**Part Number**	**Description**	**Qty.**
67	0000900100	Gear Pump - Lube	1
68	0040106300	Washer	3
69	0010306700	Capscrew	4
70	0040400200	Schnorr 12 Washer	4
71	0120100200	Plug	1
72	0130005900	1/4", Fitting	1
73	0130005400	90 degree fitting G 1/2"	1
74	0130005800	G3/8" elbow Fitting	1
75	0130005600	G1/2" M fitting for 16mm hose	1
76	0130005700	G3/8" M fitting for 16mm hose	3
77	0990026800	Hose 16mm	2
78	0990026900	Hose clamp	4
79	1070204300	Flange - lube pump adapter	1
80	1170302000	Coupling - lube pump	1
81	1290101400	Gasket	1
82	1990030800	Oil Sump	1
83	1170301900	Coupling	1
84	0010303300	Capscrew	2
85	0040200200	Lockwasher	2

LUBRICATION PUMP KIT 2054150000 for SSH2 Series Only



LUBRICATION PUMP KIT
2054150000 (SSH2 SERIES ONLY)

- Shaft driven providing for best lubrication when extremely severe operating conditions are expected: High power output on continuous duty applications
- Work in hot climate areas
- High speed (2500 to 3700 RPM of the main shaft) during long highway trips.
- Using the lube kit option kit is recommended when using PTO remote driveline connected to the front side of the unit.
- All parts needed for the installation are included in the kit and fit externally onto the Split Shaft Unit.

FITTING INSTRUCTIONS

Locate and remove the cover of the intermediate idler shaft found on the unit's rear side. Find the tapped hole in the idler shaft and place Loctite 243 on the thread and screw the coupling (item 80) in to the shaft

Install the pump adapter plate (item 79), the coupling (item 83) and the pump (item 67) using capscrews (item 70.) Connect the fittings (item 76) with their washer (item 68) to the pump ports.

Remove the unit's bottom plate and fasten the oil sump (item 82) using the existing bolts.

Connect the fittings (item 73 and 75) with each other and fasten them to the 1/2" oil outlet in the oil sump. Fit the two hose clips (item 78) loose over the suction hose (item 77), slip the hose ends over the fittings (items 75 and 76) and secure by tightening the hose clips.

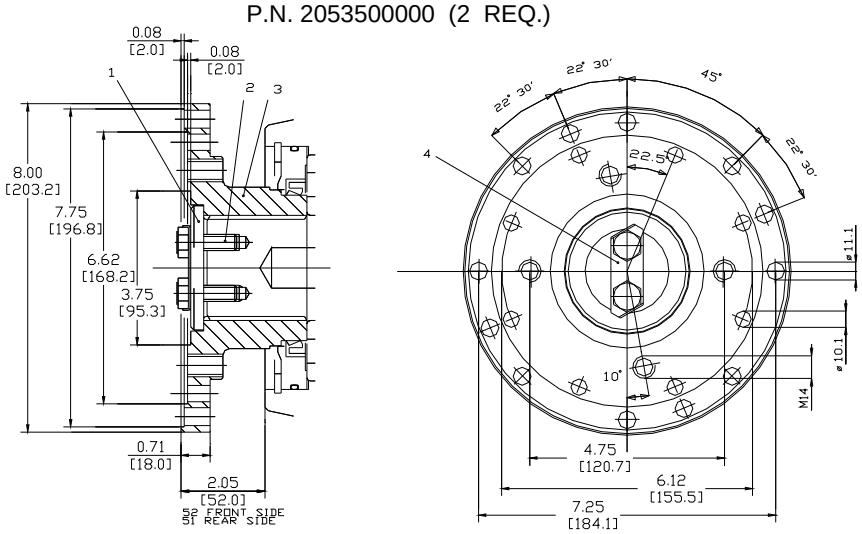
Remove the plug located at the top of the unit and install (items 72, 74, 68, and 76) tighten these fittings.

Fit the two remaining clips over the pressure hose (item 77), slip the hose ends over the fittings (item 76) and tighten the clips.

Install the oil drain plug (item 71) and fill with SAE 90 EP oil to the correct level of the oil level port (item 51).

SSV*-14 AND SSH2-14

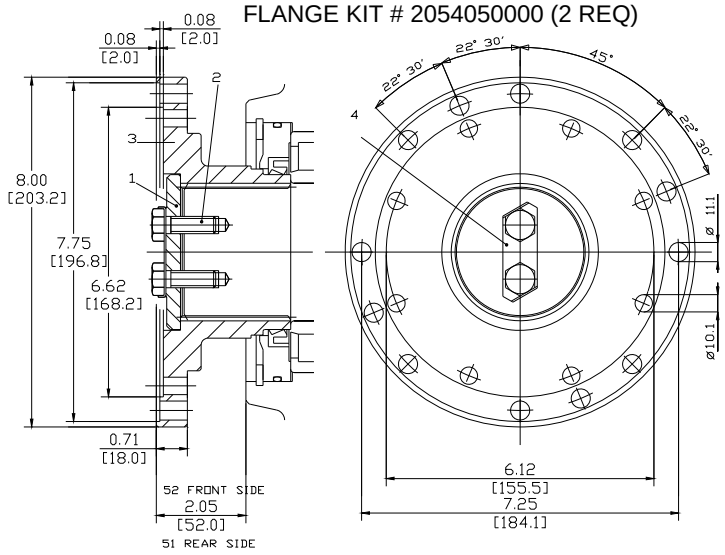
MAIN TRANSMISSION FLANGE KIT 1500/1600/1700/1800
P.N. 2053500000 (2 REQ.)



ITEM	PART NO	DESCRIPTION	QTY	
1	1270212400	WASHER	1	
2	0010101400	CAPSCREW M10X30	2	Torq. To 37 ft.lb. [50 Nm]
3	1160400900	FLANGE	1	
4	1990024400	TAB	1	

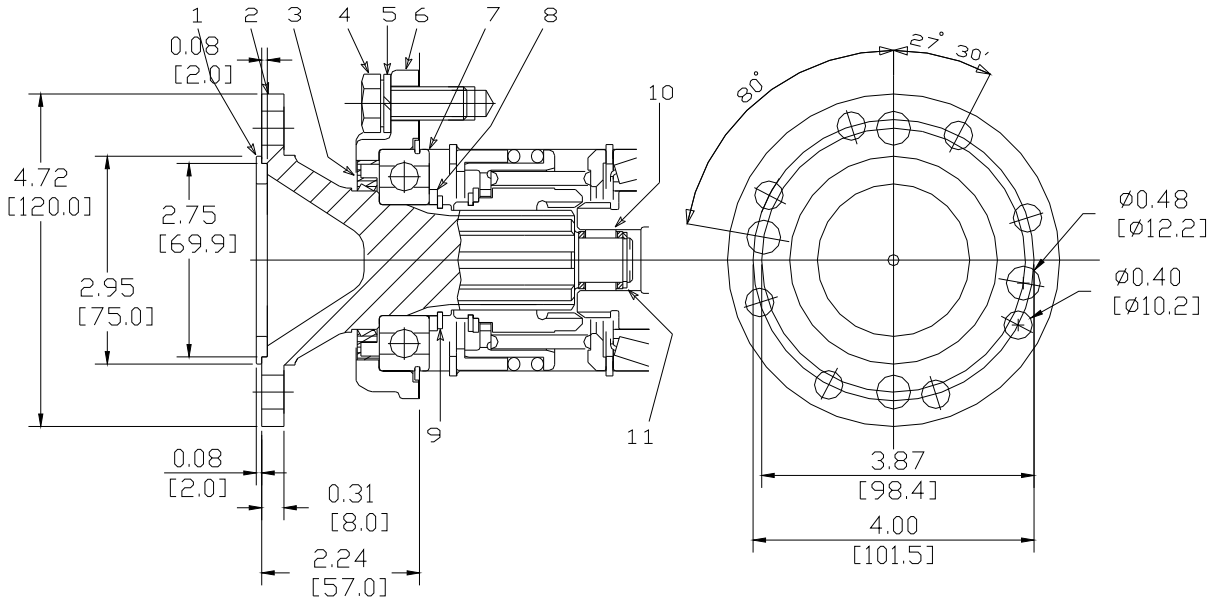
SSV*-21 AND SSH2-21

1600/1700/1800 MAIN THRU FLANGE
FLANGE KIT # 2054050000 (2 REQ)



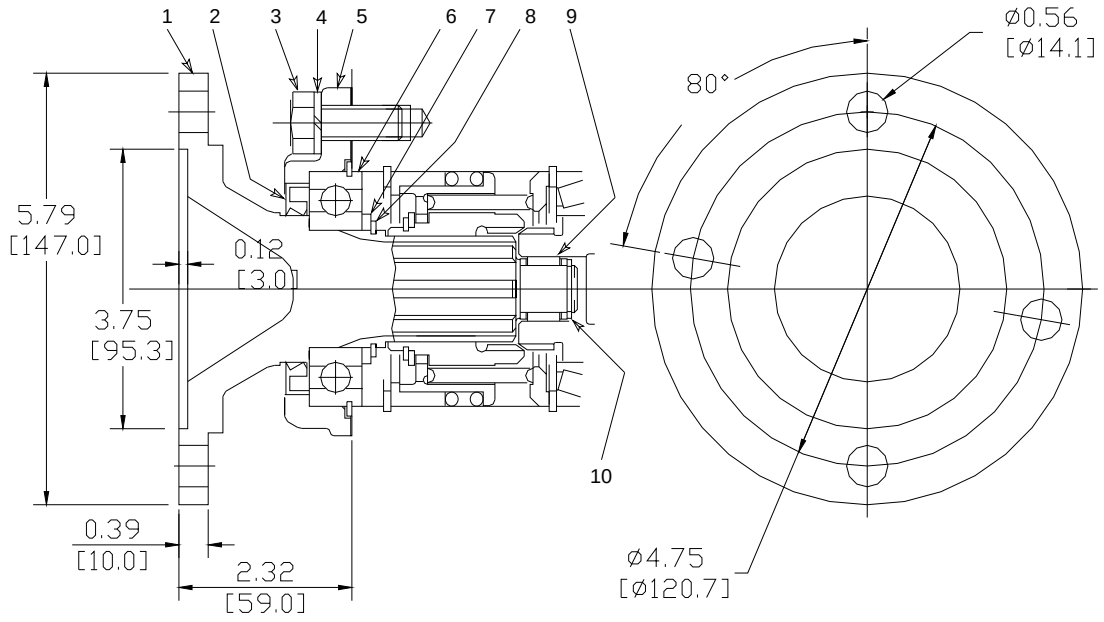
ITEM	PART NO	DESCRIPTION	QTY	
1	1270213800	WASHER	1	
2	0010101400	CAPSCREW M10X30	2	Torq. To 37 ft.lb. [50 Nm]
3	1160401100	FLANGE	1	
4	1990024400	TAB	1	

1410 OUTPUT FLANGE KIT - OPTION "C"
2053490000
SSV* AND SSH2



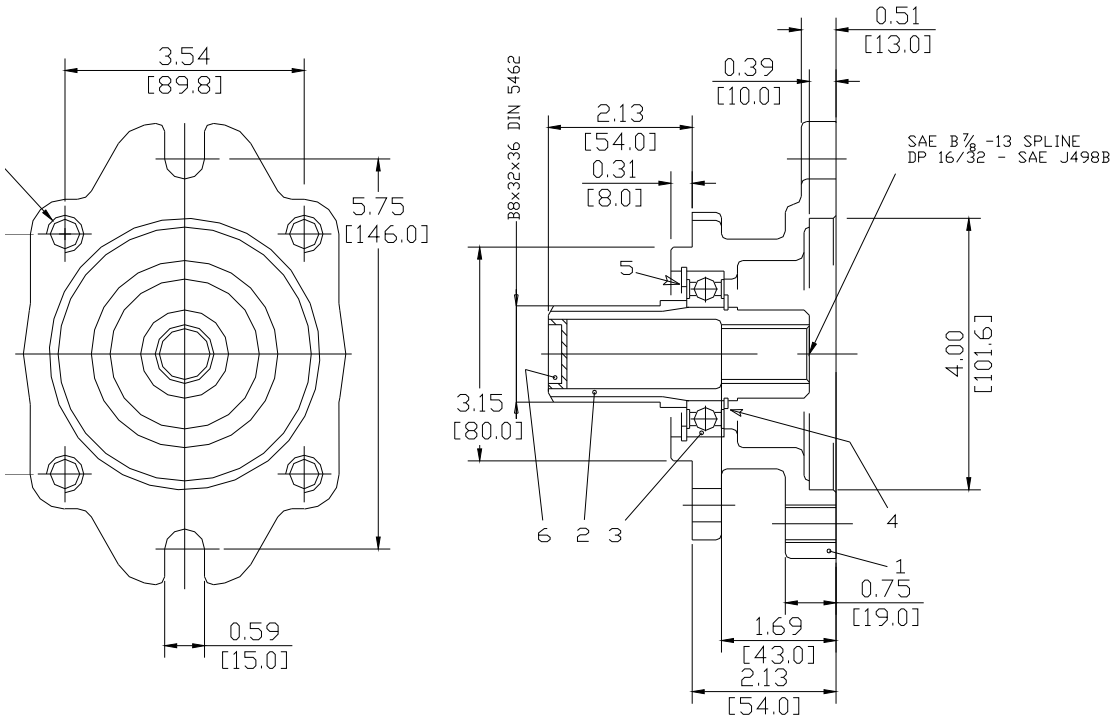
ITEM	PART NO	DESCRIPTION	QTY	
1	1270212300	CENTERING RING (DIN OPT.)	1	
2	1160401200	1410 FLANGE	1	
3	0080109000	SEAL 50X72X8 VITON	1	
4	0010101000	CAPSCREW M12X30	4	Torq. To 37 ft.lb. [50 Nm]
5	0040200400	LOCKWASHER	4	
6	1090103700	COVER	1	
7	0100100500	BEARING	1	
8	1260102600	SPACER	1	
9	0070400400	SNAPRING	1	
10	0100600100	BEARING	1	
11	0070400400	SNAPRING	1	

1500 OUTPUT FLANGE KIT - OPTION "D"
2053640000
SSV* AND SSH2



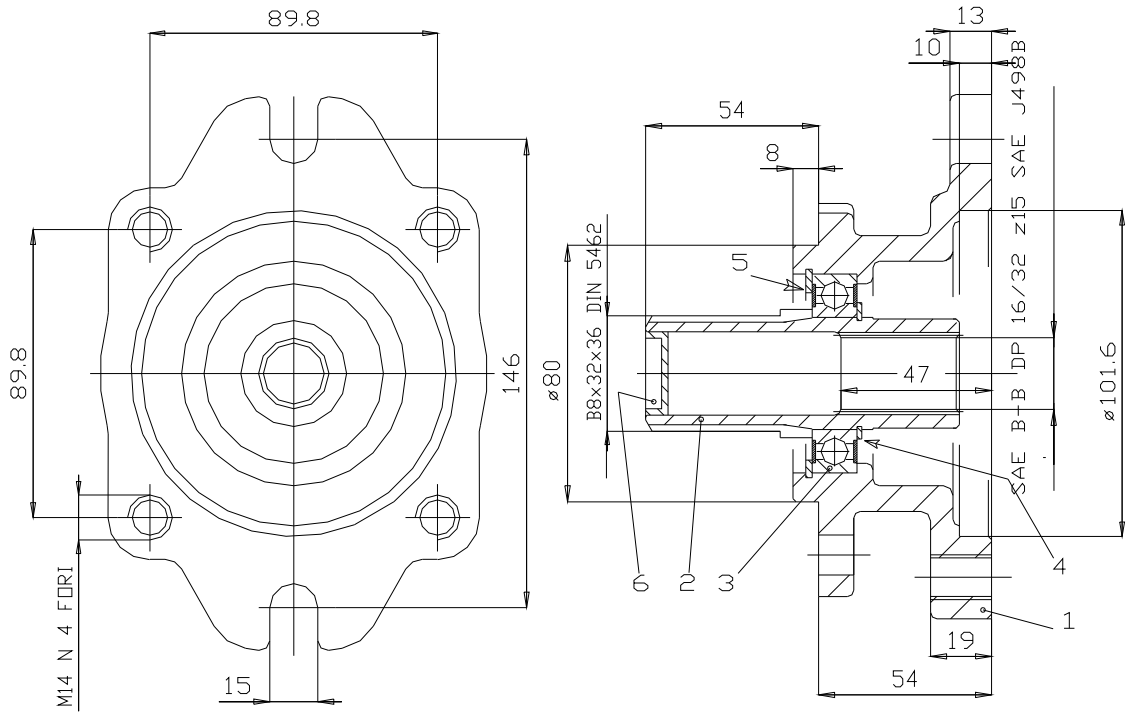
ITEM	PART NO	DESCRIPTION	QTY	
1	1160103500	1550 FLANGE	1	
2	0080109000	SEAL 50X72X8 VITON	1	
3	0010101000	CAPSCREW M12X30	4	Torq. To 37 ft.lb. [50 Nm]
4	0040200400	LOCKWASHER	4	
5	1090103700	COVER	1	
6	0100100500	BEARING	1	
7	1260102600	SPACER	1	
8	0070400400	SNAPRING	1	
9	0100600100	BEARING	1	
10	0070400400	SNAPRING	1	

SAE "B" HYDRAULIC FLANGE - OPTION "K"
3520430000B
SSV* AND SSH2 SERIES

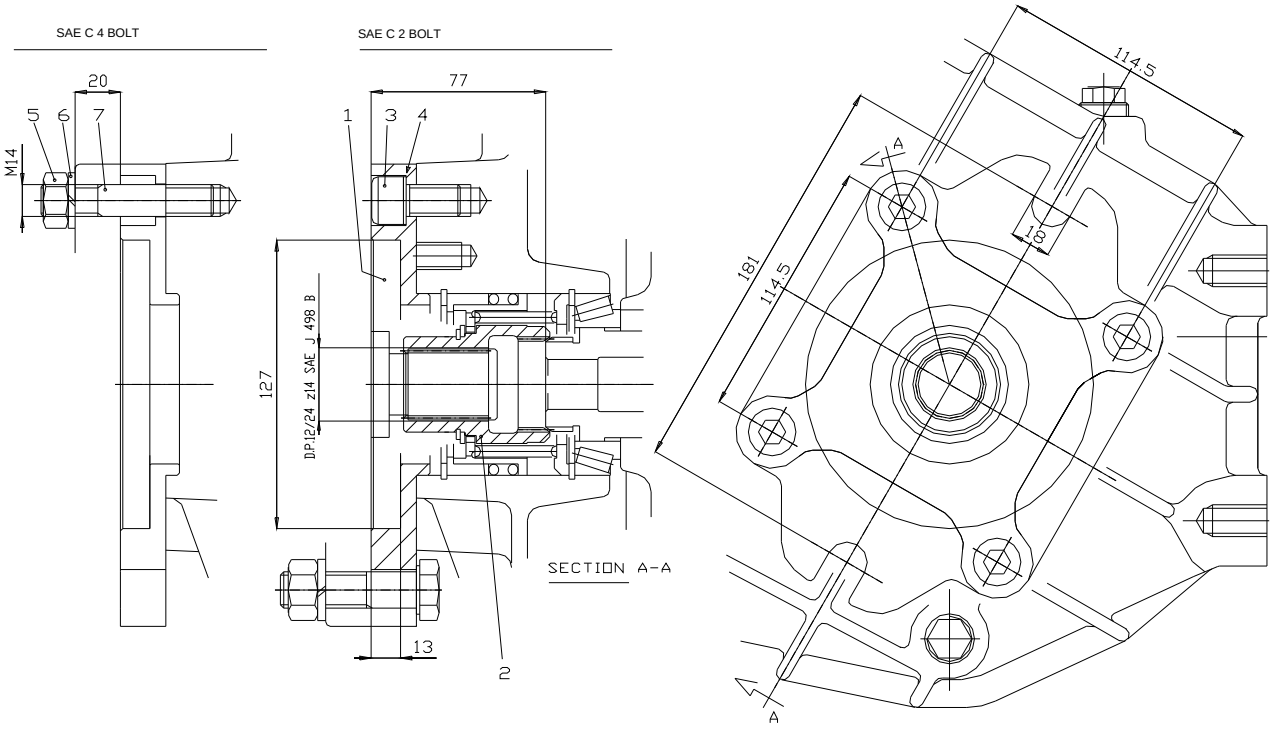


ITEM	PART NO	DESCRIPTION	QTY
1	1090105000	COVER	1
2	1170209200	SPLINED COUPLER	1
3	0100104300	BEARING	1
4	0070100300	SNAPRING	1
5	0070200900	SNAPRING	1
6	0120106400	PLUG	1
N.S.	20TK4463	MOUNTING KIT	1

SAE "B-B" HYDRAULIC FLANGE - OPTION "P"
3520440000B
SSV* AND SSH2 SERIES

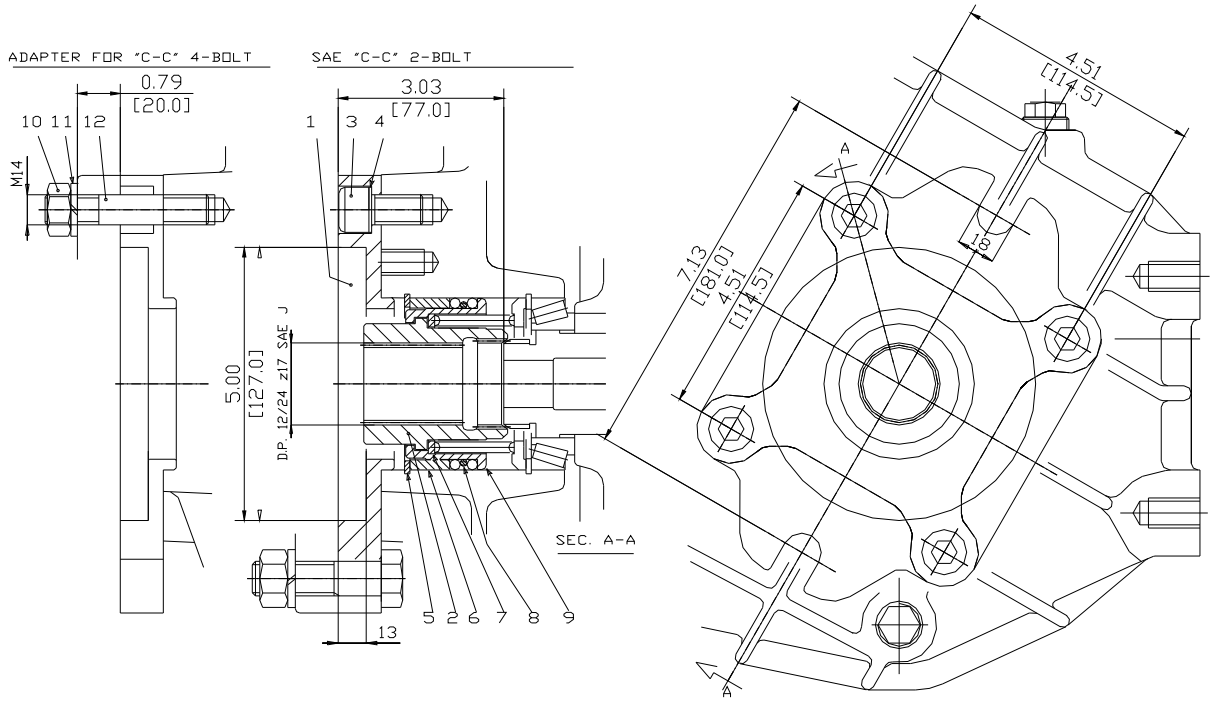


ITEM	PART NO	DESCRIPTION	QTY
1	1090105000	COVER	1
2	1170209200	SPLINED COUPLER	1
3	0100104300	BEARING	1
4	0070100300	SNAPRING	1
5	0070200900	SNAPRING	1
6	0120106400	PLUG	1
7	0011702094	SPLINED SLEEVE	1
N.S.	20TK4463	MOUNTING KIT	1



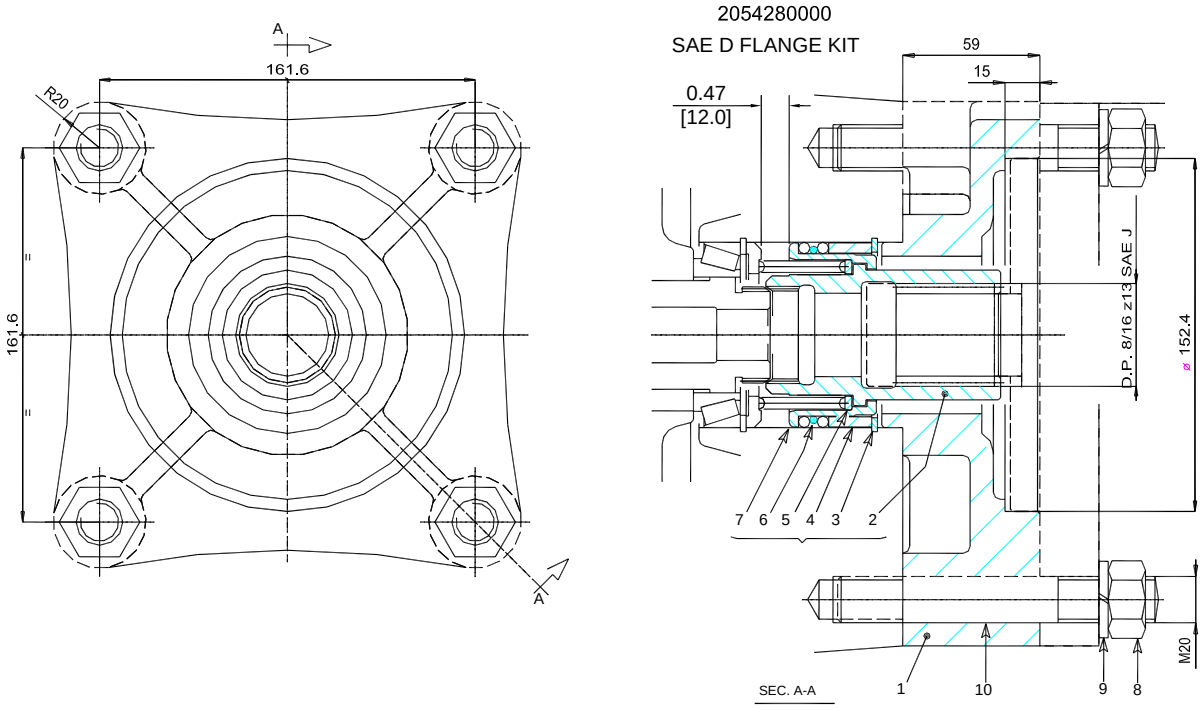
ITEM	PART NO	DESCRIPTION	QTY	
1	1070116200	FLANGE	1	
2	1170207300	SPLINED COUPLER	1	
3	0010308400	CAPSCREW M14X25	4	Torq. To 37 ft.lb. [50 Nm]
4	0040400500	WASHER	4	
5	0030101700	HET NUT M14	4	Torq. To 37 ft.lb. [50 Nm]
6	0040201000	LOCKWASHER	4	
7	0020205200	STUD M14X55	4	

SAE "C-C" OUTPUT FLANGE KIT OPTION "F"
2054270000
SSV* ONLY



2054270000 SAE C-C

ITEM	PART NO	DESCRIPTION	QTY	
1	1070116200	FLANGE	1	
3	0010308400	CAPSCREW M14X25	4	Torq. To 37 ft.lb. [50 Nm]
4	0040400500	WASHER	4	
5	0030101700	HET NUT M14	4	Torq. To 37 ft.lb. [50 Nm]
6	0040201000	LOCKWASHER	4	
7	0020205200	STUD M14X55	4	
8	1170209500	SPLINED COUPLER	1	
9	0070204800	SNAPRING	1	
10	1270214200	RING	1	
11	1270208100	WASHER	1	
12	0080213500	O-RING	1	
13	1210202700	PISTON	1	



SAE D FLANGE KIT 2054280000

ITEM	PART NO	DESCRIPTION	QT.
1	1070116300	FLANGE	1
2	1170209600	OUTPUT SHAFT	1
3	0070204800	SNAP RING	1
4	1270214200	COLLAR	1
5	1270208100	SPACER RING	1
6	0080210900	O-RING	1
7	1210202700	PISTON	1
8	0030101800	NUT M20	4
9	0040201100	LOCK WASHER	4
10	0020205500	STUD M20x110	4