



SS66

SPLIT SHAFT PTO

INSTALLATION INSTRUCTIONS



*The Muncie Split Shaft PTO
Model **SS66-U2X3-A00XXX**
(As shown, less PTO's)*

MODEL NUMBER CONSTRUCTION

SS 66 - U2 X3 - A 00 XX X

PTO Type

Split Shaft — SS

PTO Series

6-Bolt Opening (U60) – 66

Torque Rating

2900 Ft-Lbs – U2

Base Unit:

3258010300 Air (SS66)

3258020300 Cable (SS66)

Main Shaft Flange Selection

1410 (Kit: 2053740000) – X2

1480, 1550 (Kit: 2053750000) – X3

Special Features

X — None

Special Options

XX — None

PTO Mounting

00 — Both Openings Open

0X — #1 Open, #2 Covered

X0 — #1 Covered, #2 Open

XX — Both Sides Covered

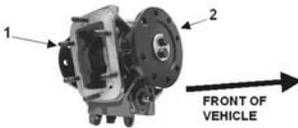
(Cover Kit: 2990230000)

Shifter Type

A — Manual Air 12V (48TK4428)

C — Cable Control (Cable not
incl.)* (28TK4426 Mtg Kit)

E — Electric/Air 12V (48TK4430)



*Order Control Cable Separately 55 Series, 2" Travel, Bulkhead Mount.
Example: KB55-BM-2-XXX

APPLICATION INFORMATION

THROUGHPUT TORQUE: 2900 FT-LBS [400 KGM]

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

Example: Ford Super Duty F-450

Engine = 7.3L Diesel Engine 235GHP @ 2600 RPM 500 Ft-Lbs @ 1800 RPM

Transmission = ZF S6-650 6 Speed OD

1st	2nd	3rd	4th	5th	6th	Rev
5.79	3.31	2.10	1.31	1.00	0.72	5.23

Through Torque = 500 Ft-Lbs X 5.79 Ratio = 2,895 Ft-Lbs

MAXIMUM PTO TORQUE: 289 FT-LBS

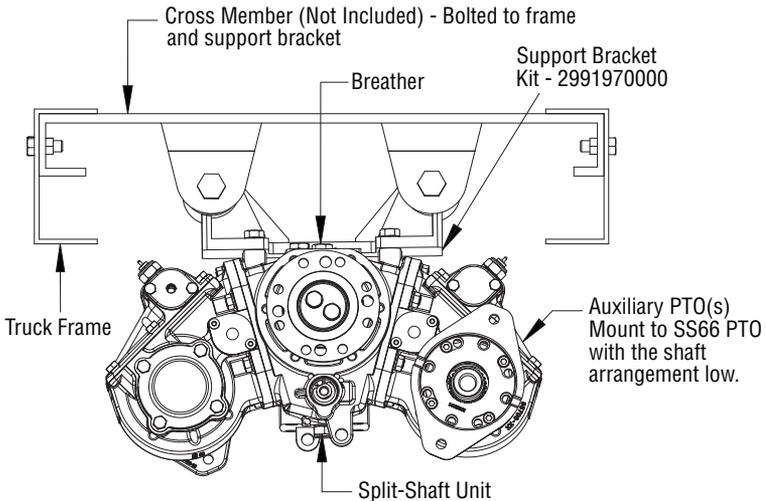
The SS66 PTO drive gear has a maximum rated torque of 289 Ft-Lbs. PTO input gear loads must not exceed this value regardless of the number of PTOs used. PTO applications are limited to intermittent application only.

SPLIT-SHAFT INSTALLATION

SPLIT-SHAFT UNIT POSITIONING

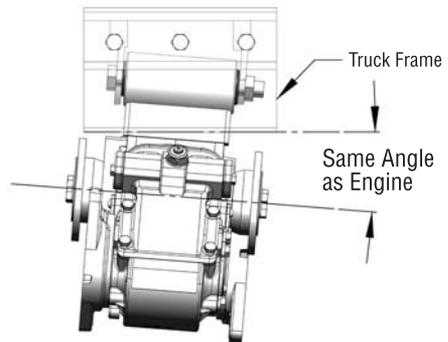
The Muncie split-shaft unit should be located between the transmission and the rear axle, as near as possible to the transmission output flange. If possible locate the split-shaft unit in place of the midship bearing. Elastic suspension elements are recommended and are to be fitted between the split-shaft and the truck chassis.

Note: The SS66 Series is not available with a driveline brake. Vehicles with a driveline brake (parking brake) attached to the rear of the transmission will need to have this brake moved to the rear of the splitshaft or have a parking brake installed for use with stationary PTO applications.



MOUNTING THE SPLIT-SHAFT UNIT TO 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. Mounting components are not provided with this unit and are the responsibility of the installer. Unit is to be mounted with breather located upright as shown in the diagram. PTO(s) should be mounted with the arrangement low as shown.



SPLIT-SHAFT INSTALLATION

DRIVE SHAFTS

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

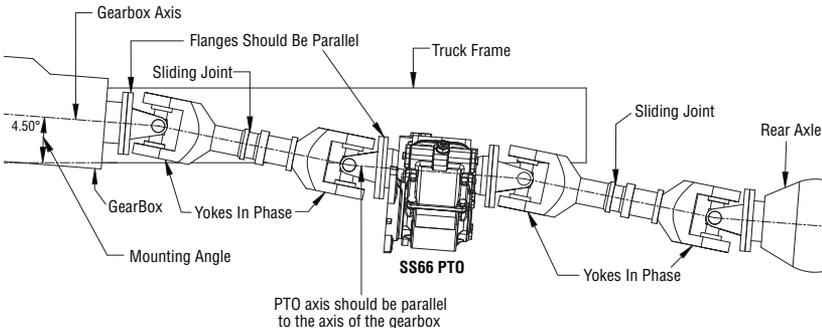
Balance - All drive shafts should be statically and dynamically balanced.

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 enough compensation is allowed for length changes. When assembling, make sure 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.

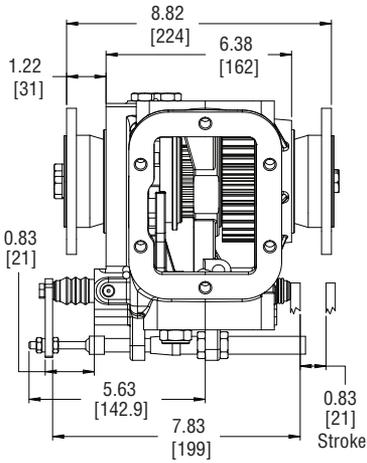


OIL LEVEL

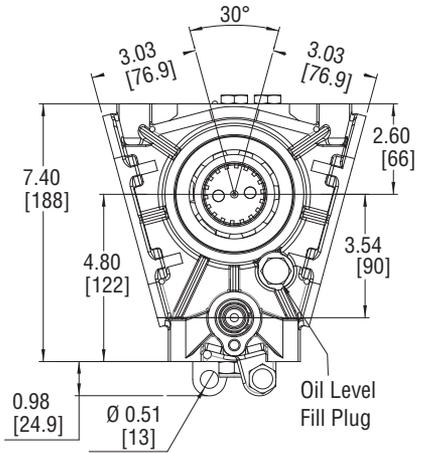
Split Shaft must be filled with oil up to fill level plug before use. Remove fill plug and fill unit to this level with SAE 90 EP gearbox oil. Replace plug. Check oil level regularly every two weeks.

DIMENSIONAL INFORMATION

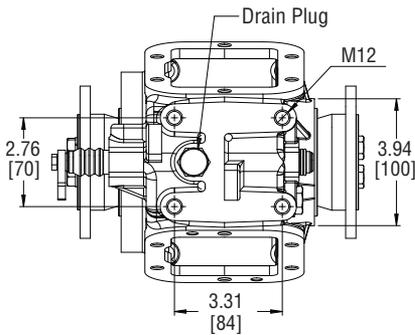
SS66 PTO



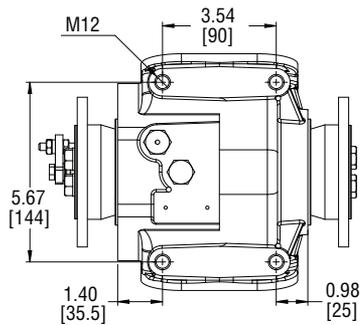
SIDE VIEW



REAR VIEW



BOTTOM VIEW

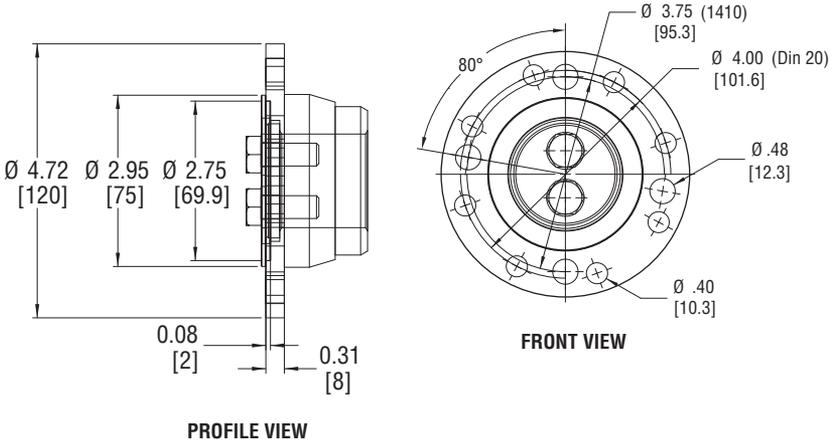


TOP VIEW

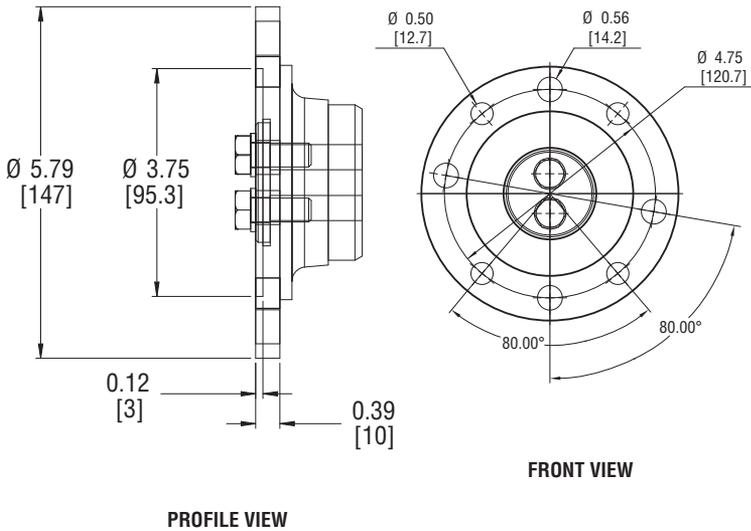
FRONT OF VEHICLE →

MAIN SHAFT FLANGES

1410/DIN 20 FLANGE

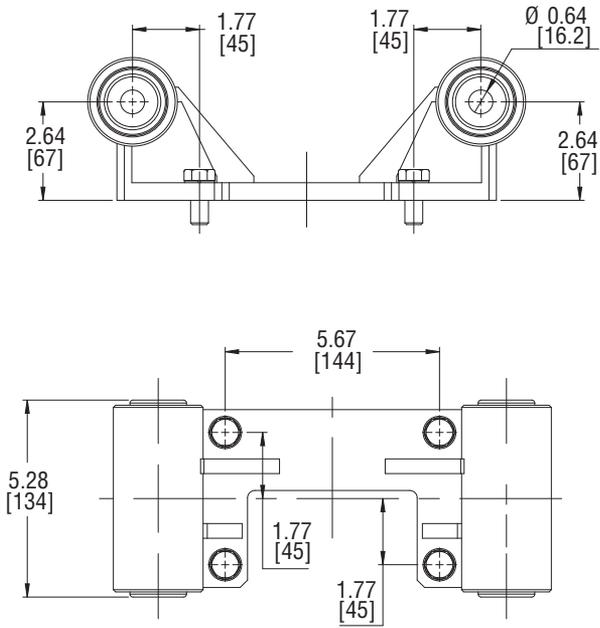


1480/1550 FLANGE



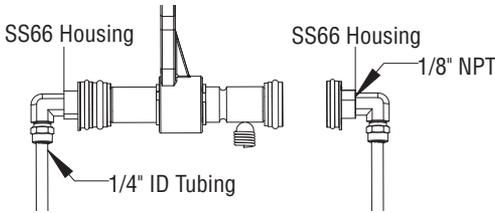
SUPPORT BRACKET

OPTIONAL KIT — 2991970000

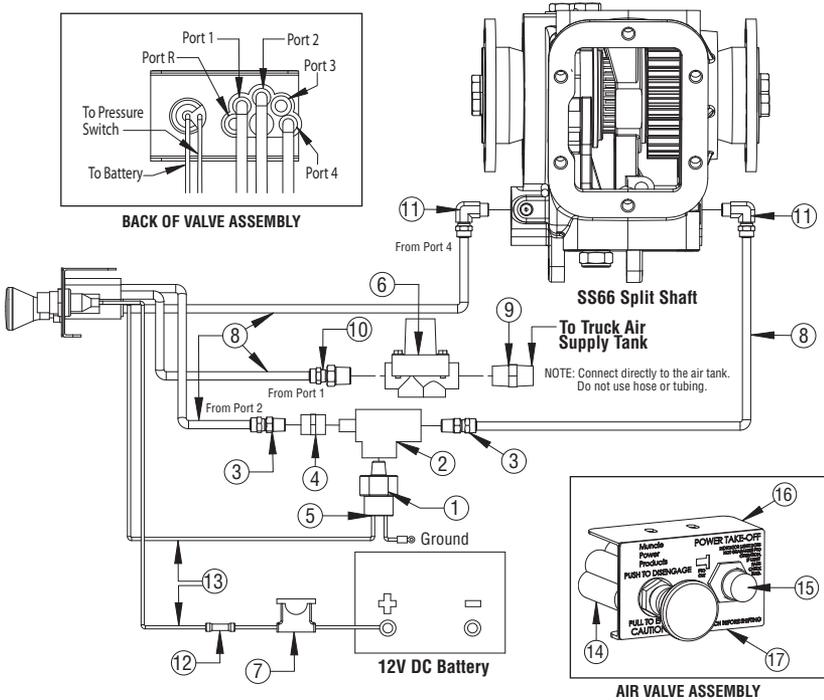


SS66 INSTALLATION KITS

SS66 ACTIVATION KIT INSTALLATION



MANUAL AIR 12V: "A" OPTION — 48TK4985

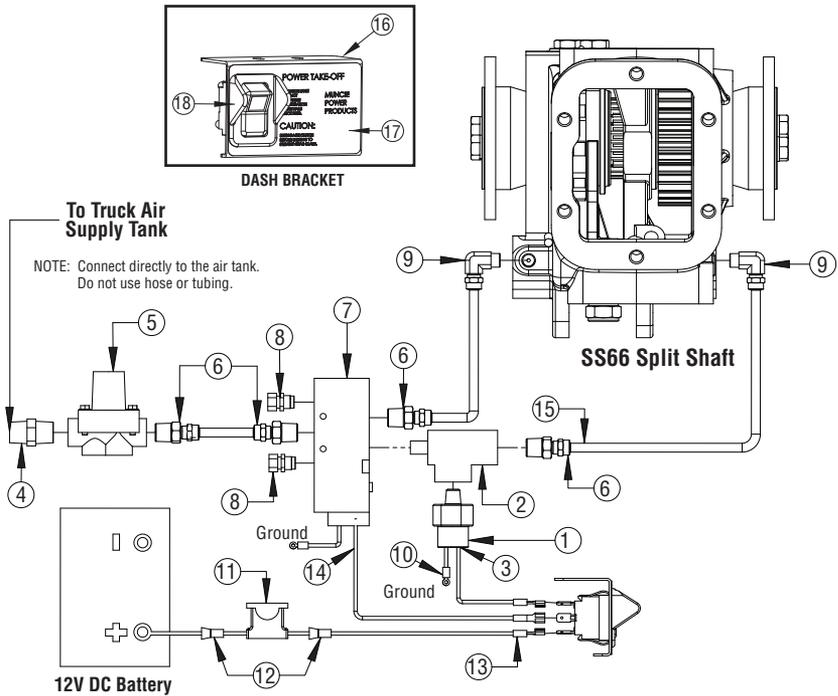


ITEM	QTY	PART NO.	DESCRIPTION
ACTIVATION KIT 48TK4985			
1	1	30T37954	Pressure Switch
2	1	44MB2252	Fitting
3	2	44MB6842	Fitting
4	1	44T35791	Fitting
5	1	34T36941	Pig Tail
ACTIVATION KIT 48M61261A (included in 48TK4985)			
6	1	31M15759	Pressure Protection Valve
7	1	33T36299	Fuse Assembly
8	1	45M44430	Air Tubing (0.25" x 30 ft.)
9	1	44MB2164	1/4" N.P.T. Nipple

ITEM	QTY	PART NO.	DESCRIPTION
10	1	44MB6844	Tube Fitting
11	2	44MB6942	Tube Fitting (Elbow)
12	3	34M18002	End Crimp
13	12.5'	37M18000	Electrical Wire
14	1	35T37955	Air Valve
15	1	32M12001	PTO Light - 12VDC
16	1	36T38049	Dash Bracket
17	1	36T38016	Face Plate
N.S.	1	34T38163	Booted Connector
N.S.	1	36MK1007	Bolt Kit

SS66 INSTALLATION KITS

ELECTRIC/AIR 12V: "E" OPTION — 48TK4986



ITEM	QTY	PART NO.	DESCRIPTION
ACTIVATION KIT 48TK4986			
1	1	30T37954	Pressure Switch
2	1	44MB2252	Fitting
3	1	34T36941	Pig Tail
ACTIVATION KIT 48T37421A (included in 48TK4986)			
4	1	44MB2164	1/4" N.P.T. Nipple
5	1	31M15759	Pressure Protection Valve
6	1	44MB6844	Tube Fitting
7	1	35T41078	Solenoid Valve
8	2	44M30137	Breather
9	2	44MB6942	Tube Fitting (Elbow)
10	1	34M18009	Ring Terminal

ITEM	QTY	PART NO.	DESCRIPTION
11	1	33T36299	Fuse Assembly
12	3	34T36362	End Crimp
13	3	34M18250	Female Spade Connector
14	12'	37M18000	Electrical Wire
15	1	45M44430	Air Tubing (0.25" x 30 ft.)
16	1	36MA1005	Dash Bracket
17	1	36M01007	Face Plate
18	1	30T35687	Switch
N.S.	2	44MB0942	Adapter Bushing
N.S.	1	34T38163	Booted Connector
N.S.	1	36MK1007	Bolt Kit

MANUAL TRANSMISSION

ENGAGING THE SPLIT SHAFT PTO

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.

AUTOMATIC TRANSMISSION

ENGAGING THE SPLIT SHAFT PTO

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).

AUTOMATIC TRANSMISSION

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.

POWER TAKE-OFF WARRANTY

The Muncie Power Take-Off is warranted to be free of defects in material or workmanship and to meet Muncie's standard written specifications at the time of sale. Muncie's obligation and liability under this warranty is expressly limited to repairing or replacing, at Muncie's option, within one year after date of original installation any defective part or parts or any product not meeting the specifications.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. MUNCIE MAKES NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR ANY PARTICULAR PURPOSE. MUNCIE'S OBLIGATION UNDER THIS WARRANTY SHALL NOT INCLUDE ANY TRANSPORTATION CHARGES OR COSTS OF INSTALLATION OR ANY LIABILITY FOR DIRECT, INDIRECT SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OR DELAY. THE REMEDIES SET FORTH HEREIN ARE EXCLUSIVE, AND MUNCIE'S LIABILITY WITH RESPECT TO ANY CONTRACT OR SALE OR ANYTHING DONE IN CONNECTION THEREWITH, WHETHER IN CONTRACT, IN TORT, UNDER ANY WARRANTY, OR OTHERWISE, SHALL NOT, EXCEPT AS EXPRESSLY PROVIDED HEREIN, EXCEED THE PRICE OF THE PRODUCT OR PART ON WHICH SUCH LIABILITY IS BASED.

If requested by Muncie, products or parts for which a warranty claim is made are to be returned transportation prepaid to a Muncie Service Center. Any installation or use not in accordance with catalogue or package instructions, other improper use, operation beyond capacity, substitution of parts not approved by Muncie, use with equipment other than the equipment on which the Power Take-Off is first installed, or alteration or repair made to the Power Take-Off other than at a Muncie Service Center shall void this warranty. No employee or representative of Muncie is authorized to change this warranty in any way or to grant any other warranty.



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