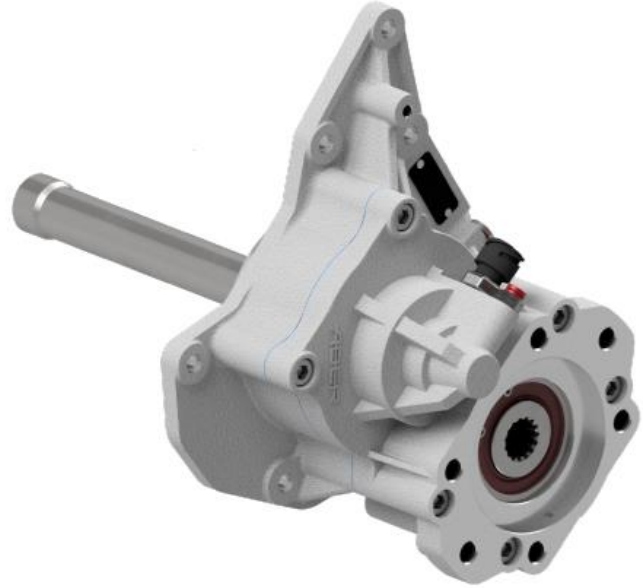


- Max torque rating of 295 lb.ft Conti – 384 lb.ft Peak

| Code | DT12-*** |
|-------|------------------|
| A-box | DT12-DH (DA) |
| | DT12-OH (OA) |
| | DT12-DHE/DV (DC) |
| | DT12-OHE/OV (OC) |
| | DT12-OVX (OD) |
| B-box | DT12-DHL (DB) |
| | DT12-OHL (OB) |



ABER

Manufacturing Hydraulic Excellence since 1972

Note: ProDrive is constantly engaged in improving its products and, therefore, reserves itself the right to modify without any further notice the characteristics shown in this material.

MODEL NUMBER CONSTRUCTION

TF80 - 38AM - P - 132 - EN - Z

TF80 Series

Pneumatic switch with
DIN72585 connector

| Code | Quill Shaft Data |
|------|--------------------|
| 38AM | Detroit DT12 A-Box |
| 39AM | Detroit DT12 B-Box |

| Code | Shifter |
|------|--------------|
| P | Air |
| E | Electric/Air |

| Code | Speed Ratio |
|------|-------------|
| 100 | 1/1 |
| 132 | 1/1.32 |
| 183 | 1/1.83 |

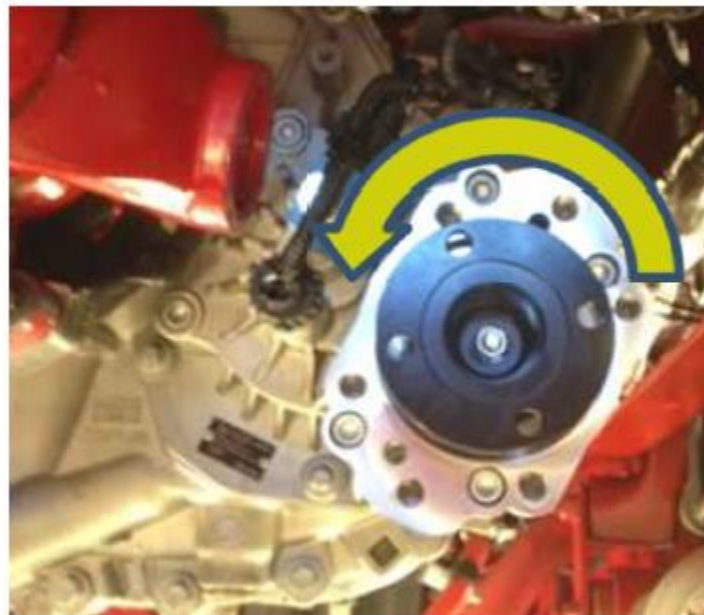
| Code | Output |
|------|-----------------------------|
| D | 1410 comp flange |
| EN | DIN 5462 8x32x36 ISO 4 bolt |
| RB | SAE-BB 15T, 2 or 4 bolts |

Final Speed Ratio - Compared to Engine %

| DT12 Rear PTO Output Speed Chart | | Slow | | Medium | | Fast | |
|-------------------------------------|--------------------|-------------------------------------|---------|--|---------|-----------------------------|---------|
| | | PTO Ratio 1:1 362-424 or 362-425 | | PTO Ratio 1:1.32 362-2HB or 362-318 | | PTO Ratio 1:1.83 362-577 | |
| DT-12 Variant | "Split" | Engine : PTO | Percent | Engine : PTO | Percent | Engine : PTO | Percent |
| DT12-DHL (DB) | Split Low 85P-001 | 1:0.78 | 78% | 1:1.06 | 106% | 1:1.47 | 147% |
| | Split High 85P-002 | 1:1 | 100% | 1:1.36 | 136% | 1:1.89 | 189% |
| DT12-OHL (OB) | Split Low 85P-001 | 1:1 | 100% | 1:1.36 | 136% | 1:1.89 | 189% |
| | Split High 85P-002 | 1:1.29 | 129% | 1:1.76 | 176% | 1:2.42 | 242% |
| DT12-DH (DA) | Split Low 85P-001 | 1:0.78 | 78% | 1:1.06 | 106% | — | — |
| | Split High 85P-002 | 1:1 | 100% | 1:1.36 | 136% | — | — |
| DT12-OH (OA) | Split Low 85P-001 | 1:1 | 100% | 1:1.36 | 136% | — | — |
| | Split High 85P-002 | 1:1.29 | 129% | 1:1.76 | 176% | — | — |
| DT12-DHE/DV (DC) | Split Low 85P-001 | 1:0.71 | 71% | 1:0.97 | 97% | — | — |
| | Split High 85P-002 | 1:0.92 | 92% | 1:1.25 | 125% | — | — |
| DT12-OHE/OV (OC) | Split Low 85P-001 | 1:0.92 | 92% | 1:1.25 | 125% | — | — |
| | Split High 85P-002 | 1:1.18 | 118% | 1:1.61 | 161% | — | — |
| DT12-OVX (OD) | Split Low 85P-001 | 1:0.94 | 94% | 1:1.28 | 128% | — | — |
| | Split High 85P-002 | 1:1.21 | 121% | 1:1.65 | 165% | — | — |

Ratios Greater than 1:1, or over 100% → PTO spins faster than engine

PTO Rotation - Counterclockwise (CCW) looking from rear of DT12

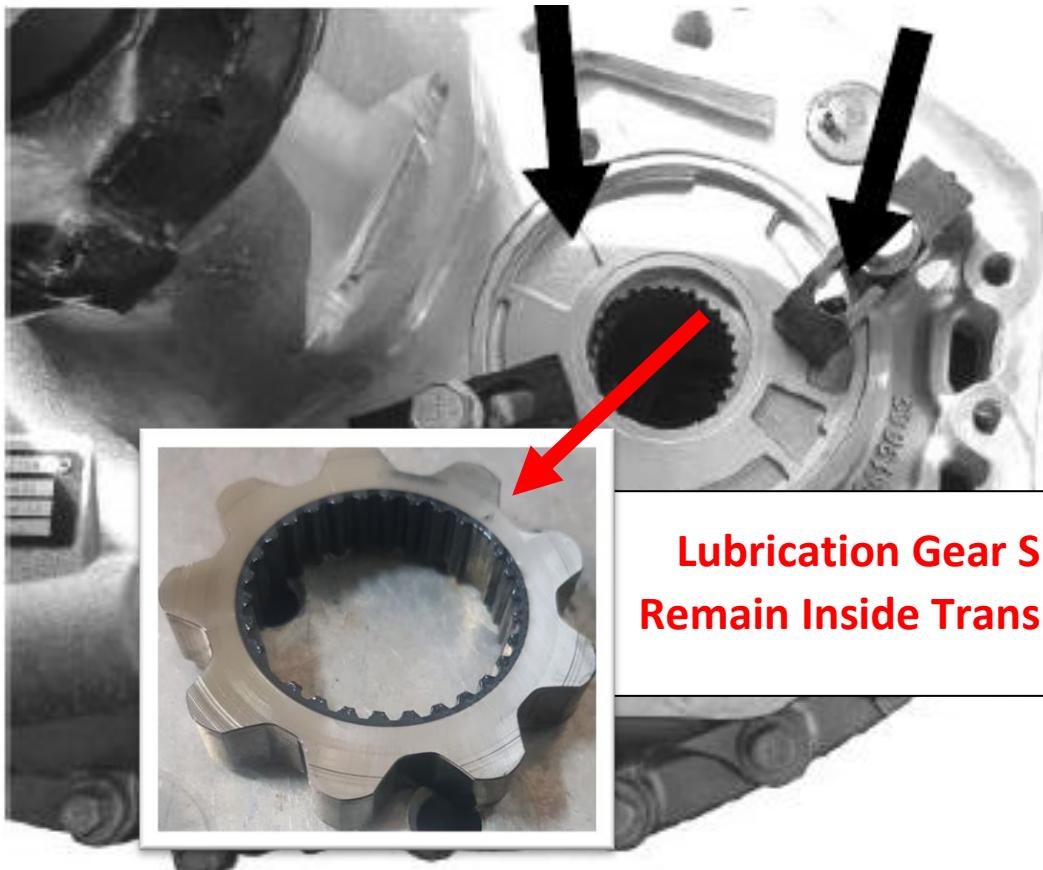


Installation Instructions

- 1- Place truck in neutral and start engine. Listen to engine and transmission. Any transmission gear noise may be more noticeable after PTO is installed.
- 2- STOP ENGINE. NEVER GO UNDER VEHICLE WITH ENGINE RUNNING.
- 3- Empty transmission Oil.
- 4- Remove PTO cover from transmission rear end and clean surface of any oil and residual material. Examine the pump at the opening. The pump gear should remain inside the transmission and behind the thrust plate installed in the next step.



REMOVE TRANSMISSION COVER



**Lubrication Gear Should
Remain Inside Transmission**

- 5- Install the thrust plate according to below picture and make sure the pin is in the correct location and matching with the hole on the thrust plate. Then insert the quill shaft as shown below:
- 6- Install the O-ring into its position on the face of the PTO and the gasket into position on the transmission.

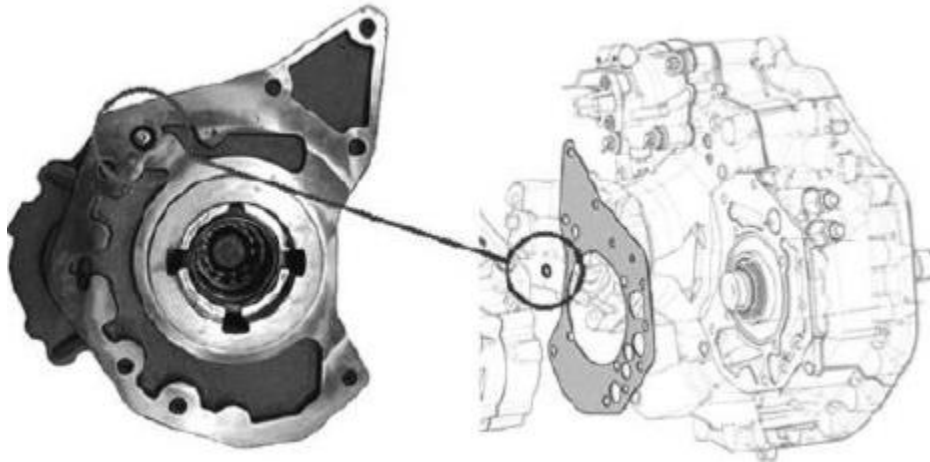
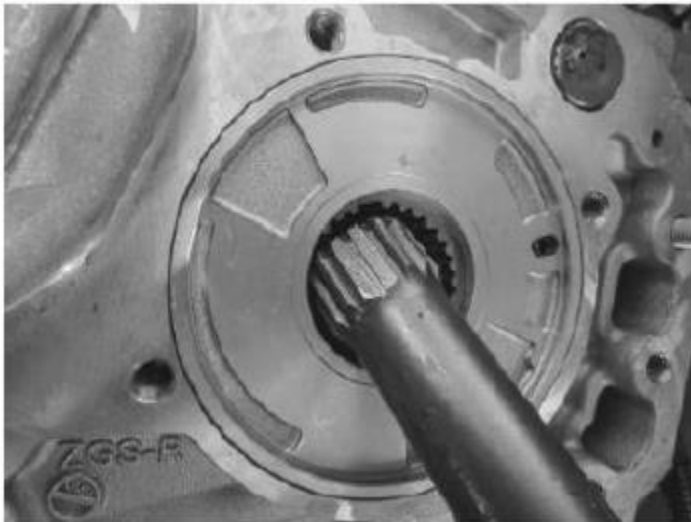


PLATE TRANSMISSION
SIDE

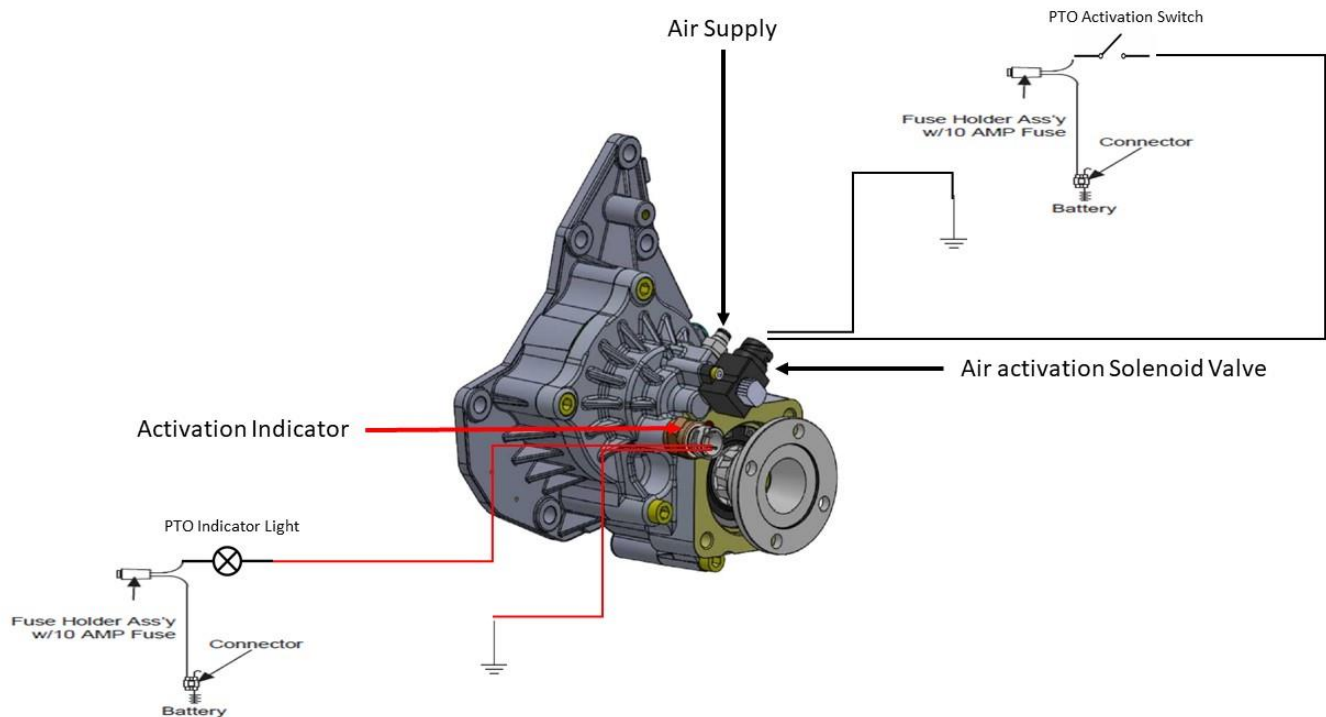


PLATE PTO
SIDE

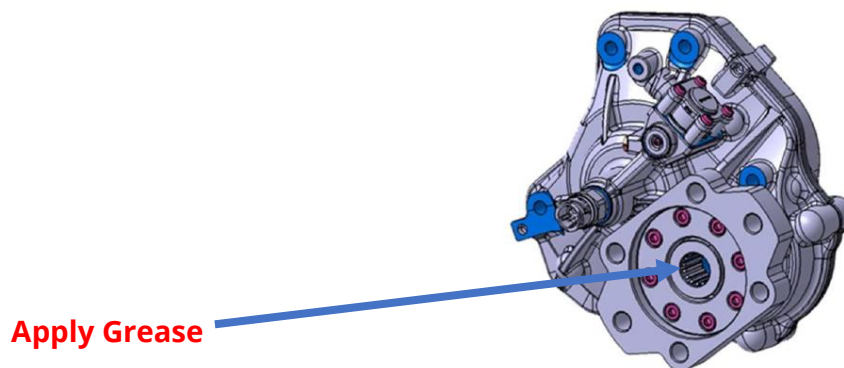


- 7- Apply some transmission oil to the outer bearing race, on the pump driveshaft, and the bearing pocket in the PTO.
- 8- Place gasket on the mating surface before mounting the PTO.
- 9- Mount the PTO on the transmission using the 7 bolts and medium strength, thread locking product (such as Loctite 243) to prevent loosening due to vibration. Tighten the mounting bolts to 50 Nm (37 ft-lb)

10- Recommended wiring diagram for indicator switch



11- Apply anti-fretting, high pressure, high temperature grease on spline before direct mounting any hydraulic pumps.



12- Refill transmission oil to OEM specified level before starting truck which is even to the bottom of the fill plug.

13- Fit a new fill plug seal and torque the fill plug to 60 Nm (44 lb.ft).

14- Direct Mount Pump Support Requirements:

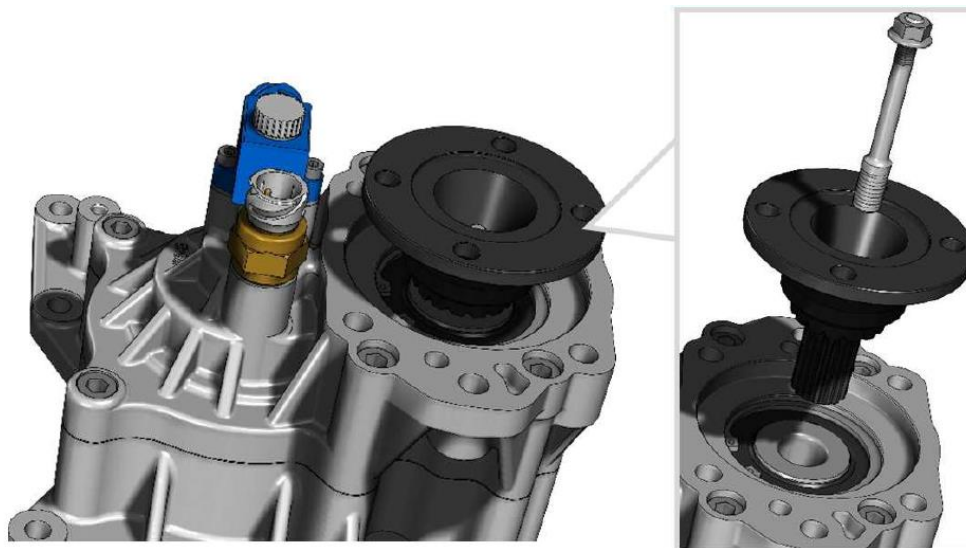
15- When the combined weight of the pump and its fittings and hoses weighs 40 lbs (18.1 kg) or more and/or the combined length of the PTO and pump is equal or higher than 18" (457.2 mm) from the PTO centerline, it is necessary for the installer to provide a support bracket at the back of the pump to support its weight.



16- Torque all fasteners using general tightening torque values unless specified in these instructions.

| Fastener Size | ft-lb (Nm) |
|-----------------------|-----------------|
| M6 standard bolt 8.8 | 7±1 (10±1) |
| M8 standard bolt 8.8 | 18±3 (24±4) |
| M10 standard bolt 8.8 | 35±6 (48±8) |
| M12 standard bolt 8.8 | 63±11 (85±15) |
| M14 standard bolt 8.8 | 103±18 (140±25) |
| M16 standard bolt 8.8 | 140±26 (190±35) |

Drive Shaft Mount - D output



SAFETY



DO NOT check backlash with the engine on. This procedure has to be made with the engine off and the truck blocked with the parking.



DO NOT go under the vehicle if the engine is running.
DO NOT attempt to work on an installed power take off with the engine running.
DO NOT operate the controls of the power take off or other driven equipment from underneath the vehicle with the engine running.
DO NOT operate the controls of the power take off or other driven equipment in any position that could result in getting caught in the moving machinery.

The application of the PTOs must follow all the instructions hereby mentioned in order to assure the safety of all personal working with the equipment including its surroundings, assure a long life to the product and preserve the warranty of the brand. All applications that do not follow the hereby instruction are solely the users responsibility. If there should happen any malfunctioning, it is strictly forbidden the disassembly of the product except if it is being made by a qualified technician of the brand or if there is a special authorization to do that. If this specification should not be followed, all warranties might be lost.