

# Dodge® Torque-Arm™ Taconite Auxiliary Seal Kit

TXT1A	TXT6A	TXT12
TXT2A	TXT8A	TDT13
TXT3B	TXT9A	TDT14
TXT4B	TXT10A	TDT15
TXT5C	TXT105-TXT905	

These instructions must be read thoroughly before installation or operation. This instruction manual was accurate at the time of printing. Please see **dodgeindustrial.com** for updated instruction manuals.

WARNING: To ensure the drive is not unexpectedly started, turn off and lock-out or tag power source before proceeding. Failure to observe these precautions could result in bodily injury.

WARNING: All products over 25 kg (55 lbs) are noted on the shipping package. Proper lifting practices are required for these products.



## **INSTALLATION:**

## TXT1A & TXT2A, TXT105 & TXT205

 Locate, drill, and tap three holes for the input auxiliary seal per the drawing and Table 2.

CAUTION: Do not exceed the specified drill depth listed in the chart. Failure to observe this precaution could result in damage to the equipment.

- Locate, drill, and tap three holes for the output auxiliary seal per the drawing and Table 2. TXT1A & TXT2A, TXT105 & TXT205 both sides of reducer.
- Slide rubber V-ring seal onto input shaft so that seal lip
  faces away from the reducer. Care should be observed while
  installing the rubber seal to avoid contact with the sharp
  edges of the input shaft keyseat. To avoid damage to the
  V-ring, cover the keyseat with tape or paper.
- Place the input shaft auxiliary seal housing in place. Install screws and lock washers provided with the kit. Tighten screws alternately and evenly to 96 in.-lbs.
- Place the LH and RH output hub auxiliary seal housing in position. Install screws and lock washers provided with the kit. Tighten screws alternately and evenly to 96 in.-lbs.

WARNING: Because of the possible danger to person(s) or property from accidents which may result from the improper use of products, it is important that correct procedures be followed. Products must be used in accordance with the engineering information specified in the catalog. Proper installation, maintenance and operation procedures must be observed. The instructions in the instruction manuals must be followed. Inspections should be made as necessary to assure safe operation under prevailing conditions. Proper guards and other suitable safety devices or procedures as may be desirable or as may be specified in safety codes should be provided, and are neither provided by Dodge nor are the responsibility of Dodge. This unit and its associated equipment must be installed, adjusted and maintained by qualified personnel who are familiar with the construction and operation of all equipment in the system and the potential hazards involved. When risk to persons or property may be involved, a holding device must be an integral part of the driven equipment beyond the speed reducer output shaft.

### TXT3B through TXT10A, TXT305A through TXT905

- Remove all bolts from the input seal carrier. Slide rubber
  V-ring seal onto input shaft so that seal lip faces away from
  the reducer. Care should be observed while installing the
  rubber seal to avoid contact with the sharp edges of the
  input shaft keyseat. To avoid damage to the V-ring, cover the
  keyseat with tape or paper. Place the auxiliary seal cover on
  top of the input seal carrier, using the bolts supplied with the
  kit, secure the auxiliary cover and input seal carrier.
- 2. TXT3B through TXT6A Locate, drill, and tap three holes for the RH only output auxiliary seal per the appropriate Table (see Tables 2 and 3).
- **3. TXT7A through TXT10A** Locate, drill, counterbore, and tap four holes for the RH only output auxiliary seal per Table 3.
- 4. Place the RH auxiliary seal cover in position and secure with bolts supplied with the auxiliary kit.
- TXT305A through TXT905 Remove either three or four screws as required from the RH output seal carrier. Place auxiliary seal cover on top of the carrier and using bolts supplied with the kit, secure auxiliary cover and output seal carrier.
- 6. TXT3B through TXT6A, TXT305A through TXT605 -Remove three screws from the LH output seal carrier. Place auxiliary seal cover on top of the carrier and using bolts supplied with the kit, secure auxiliary cover and output seal carrier.
- 7. TXT7A through TXT10A, TXT705 through TXT905 -Remove four screws from the LH output seal carrier. Place auxiliary seal cover on top of the carrier and using bolts supplied with the kit, secure auxiliary cover and output seal carrier.

## TXT1A through TXT10A, TXT105 through TXT905

- Remove the standard filter breather plug from the reducer and replace with the ceramic breather plug furnished with the auxiliary seal kit.
- 2. Mount the reducer on the driven shaft per the instruction manual packaged with the reducer.
  - WARNING: Insure that all guards are properly installed prior to operating equipment. Exercise extreme care to avoid contacting rotating parts. Failure to observe these precautions could result in bodily injury.
- Fill seal cavity in both output hub seals and the input shaft seal with a #2 consistency lithium base grease while the reducer is operating. Seal cavities are full when grease shows at the bushing O.D. of the output hub and at the purge hole, opposite the grease fitting, of the input shaft auxiliary seal housing.
- Re-lubricate as often as necessary to maintain a fresh supply of grease at the seals.

#### **TXT12 through TDT15**

- Remove all bolts from the input shaft seal carrier, but do not remove the seal carrier itself. Slide rubber V-ring seal onto input shaft so that seal lip faces away from reducer. Extreme care should be observed while installing seal to avoid contact with the sharp edges of the keyseat. To avoid any seal damage, cover the keyseat with tape or paper.
- Place input shaft auxiliary seal housing in position. Note the
  two lengths of screws provided with the kit. Install the shorter
  screws thru the auxiliary seal housing and input shaft carrier
  using the lockwashers removed from the reducer. Tighten
  screws alternately and evenly to the torque shown in Table 1.
- Remove every other bolt from one output hub seal carrier.
  Place one output hub auxiliary seal housing in position, install
  longer screws provided with the kit using the lockwashers
  provided from the reducer. Tighten screws alternately and
  evenly to the torque shown in Table 1.
- 4. Repeat step 3 for the other output hub auxiliary seal.
- 5. Remove the breather plug from the reducer and replace it with the filter breather furnished with the kit. This applies to sizes TXT6 thru TXT10 and TXT605 thru TXT905 only.
- 6. Mount reducer on driven shaft as outlined in the instruction sheet packed with the reducer.
- 7. Fill seal cavity in both output seals and the input shaft seal with a #2 consistency lithium base grease while the reducer is running. Seal cavities are full when grease shows at the bushing O.D. of the output hub and at the purge hole, opposite the grease fitting, of the input shaft auxiliary seal housing.
- Relubricate as often as necessary to maintain a fresh supply of grease at the seals.

Table 1-Torque Values

Dolla costion	Wrench Torque (inch-pounds)					
Bolt Location	TXT12	TDT13	TDT14	TDT15		
Input Shaft Auxiliary Seal	1800	1800	3120	3120		
Output Hub Auxiliary Seal	3120	3120	5160	5160		

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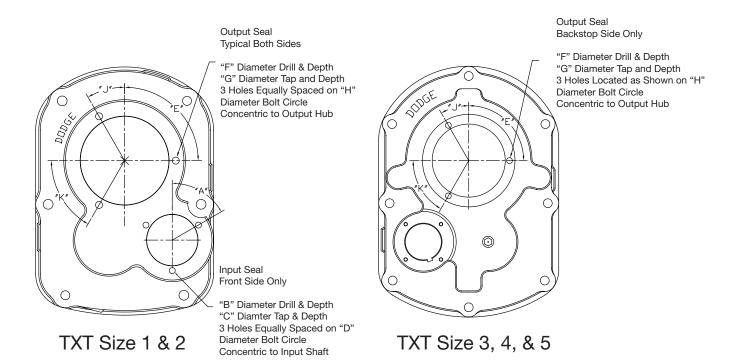


Figure 1 - Machining Dimensions for Installation of Taconite Auxillary Seal Kits for TXT1A-TXT5C and TXT105-TXT505A

Table 2–Machining Dimensions for Installation of Taconite Auxiliary Seal Kits for TXT1A–TXT5C and TXT105–TXT505A (Reference Figure 1 for Location Details)

Reducer Size	"A" (Degrees)	"B" ① (Inches)	"C" (Inches)	"D" (Inches)	"E" (Degrees)	"F" ① (Inches)	"G" (Inches)	"H" (Inches)	"J" (Degrees)	"K" (Degrees)
TXT1A	60°	#7 Ø 3/4 DP	1/4-20 1/2 DP	2-5/8Ø	120°	#7 Ø 3/4 DP	1/4-20 1/2 DP	4-1/8Ø	0°	30°
TXT2A	60°	#7 Ø 13/16 DP	1/4-20 9/16 DP	2-15/16 Ø	120°	#7 Ø 7/8 DP	1/4-20 9/16 DP	4-3/4Ø	0°	30°
ТХТЗВ	N/A	2	2	2	90°	#F Ø 3/4 DP	5/16-18 17/32 DP	5-1/4Ø	30°	50°
TXT4B	N/A	2	2	2	30°	5/16 Ø 15/16 DP	3/8-16 9/16 DP	6.0Ø	90°	130°
TXT5C	N/A	2	2	2	90°	5/16 Ø 15/16 DP	3/8-16 9/16 DP	6-5/8Ø	30°	60°
TXT105	60°	#7 Ø 3/4 DP	1/4-20 1/2 DP	2-15/16	120°	#7 Ø 3/4 DP	1/4-20 1/2 DP	4-1/8Ø	0°	30°
TXT205	60°	#7 Ø 13/16 DP	1/4-20 9/16 DP	3-11/16	120°	#7 Ø 7/8 DP	1/4-20 5/8 DP	4-3/4Ø	0°	30°
TXT305A	N/A	2	2	2	90°	#F Ø 3/4 DP	5/16-18 17/32 DP	5-1/4Ø	30°	50°
TXT405A	N/A	2	2	2	30°	5/16 Ø 15/16 DP	3/8-16 9/16 DP	6.0Ø	90°	130°
TXT505A	N/A	2	2	2	90°	5/16 Ø 15/16 DP	3/8-16 9/16 DP	6-5/8Ø	30°	60°

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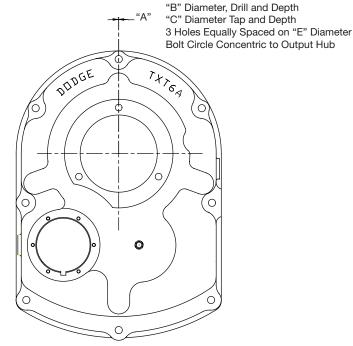
① Drill depth is maximum and must not be exceeded.

② Place auxiliary seal cover on input seal carrier using bolts provided.

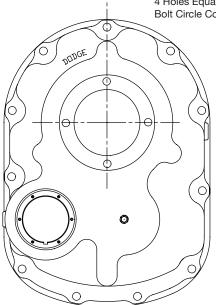
TXT 6A Only Output Seal Installation Backstop Side Only

TXT 7A Thru 10A Only Output Seal Installation Backstop Side Only

"B" Diameter, Drill and Depth "C" Diameter Tap and Depth 4 Holes Equally Spaced on "E" Diameter Bolt Circle Concentric to Output Hub







TXT Size 7A Thru 10A **Backstop Side Only** 

Figure 2 - Machining Dimensions for Installation of Taconite Auxillary Seal Kits for TXT6A-TXT10A

Table 3-Machining Dimensions for Installation of Taconite Auxiliary Seal Kits TXT6A-TXT10A (Reference Figure 2 for Location Details)

Reducer Size	"A" (Degrees)	"B" ① (Inches)	"C" (Inches)	"D" (Inches)	"E" (Inches)
TXT6A	0°	5/16 Ø 1-3/8 DP	3/8-16 1-1/16 DP	7/16Ø 3/8 DP	7-1/4Ø
TXT7A	0°	23/64 Ø 1-11/16 DP	7/16-14 1-5/16 DP	1/2Ø 3/8 DP	8-1/8Ø
TXT8A	0°	5/16Ø 1-11/16 DP	3/8-16 1-3/8 DP	7/16Ø 3/8 DP	8-5/8Ø
TXT9A	0°	5/16 Ø 1-5/8 DP	3/8-16 1-5/16 DP	7/16Ø 3/8 DP	9-15/16 Ø
TXT10A	0°	5/16Ø 1-5/8 DP	3/8-16 1-5/16 DP	7/16Ø 3/8 DP	11.0Ø

① Drill depth is maximum and must not be exceeded.

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