Single Reduction Screw Conveyor and Hydroil Screw Conveyor Drive

Instruction Manual

SCXT / HSCXT 305E
SCXT / HSCXT 405E
SCXT / HSCXT 505E
SCXT / 605E
SCXT / 705E

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.

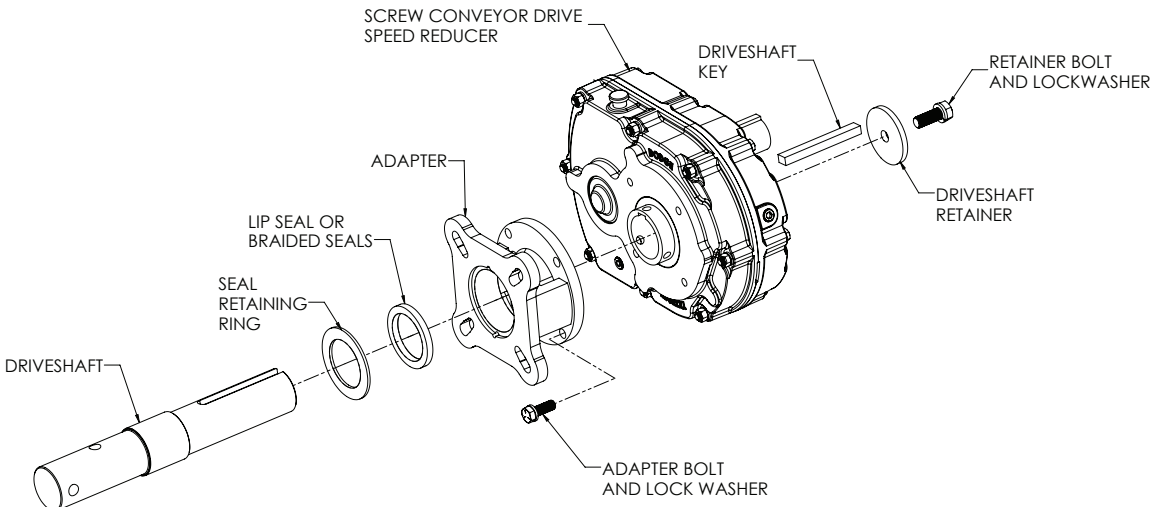


Figure 1 - SCXT Assembly

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.

ASSEMBLY

NOTE: A screw conveyor drive consists of three sub-assemblies listed below.

1. Reducer – Includes speed reducer, shaft retainer, retainer bolt and lockwasher
2. Adapter Assembly – Includes adapter bolts, lockwashers, a lip type seal and a seal retaining ring
3. Drive Shaft – Includes shaft and key

Make certain none of the parts have been damaged in shipment. Any shipping damage should be promptly reported to the carrier. Read all instructions in this manual before attempting to assemble or install the screw conveyor drive. It is important that assembly be performed in the following sequence and that each step be completed before continuing to the next.

NOTE: This reducer is compatible with the Dodge sensor that can be installed in the adapter plug labeled "smart sensor". The plug and sensor can be moved to different locations as required by mounting position.

Standard Lip Type Seal – Assembly

1. Place adapter on a work bench with the large trough end facing up.
2. Place seal in adapter so that spring faces out. Seal should be tapped evenly into place in the adapter with a small hammer, applying force only on the outer corner of the seal. Fill cavity between lips of seal with grease.
3. Install seal retainer ring by tapping with a hammer.
4. Move to "Adapter To Reducer – Assembly" section.

Optional Adjustable Packing Adapter – Assembly

1. Place adapter on a work bench with the large trough end facing up.
2. Install the two threaded studs from the trough end, using a flat head screwdriver in the slotted end of the studs. Install the studs just far enough to allow the packing retainer flange to clear the top of the studs on the opposite side.
3. For some smaller sizes, it may be necessary to place the adapter into place before running the studs down, and install the packing kit from the trough side, and then the keeper plate.
4. Install the retainer ring by tapping evenly with a hammer.
5. Flip over the adapter, placing the larger trough end down on the work bench.
6. Compress and install one braided seal into the machined bore of the adapter. Continue with the other two braided seals, offsetting the joints.
7. Install the packing retainer, placing the machined shoulder against the braided seals.
8. Install the nuts hand tight. Do not tighten these nuts with a tool until the driveshaft has been installed.
9. See Figure 2 for assembly view with nomenclature.
10. Move to "Adapter To Reducer – Assembly" section.

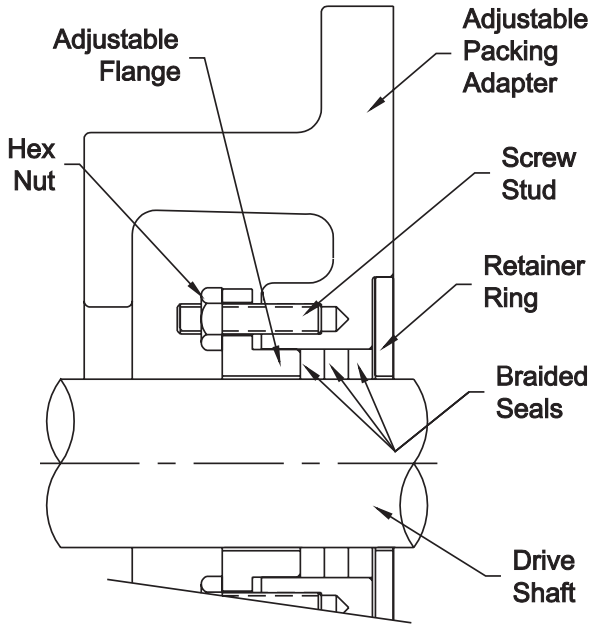


Figure 2 - Optional Adjustable Packing Adapter

Adapter To Reducer – Assembly

1. Carefully place the reducer on its side in order to install the adapter to the reducer.
2. Taking into consideration the final orientation of the gearbox, install the adapter with one opening in the downward position.
3. Align the small end of the adapter against the machined surface of the reducer.
4. Install the four bolts with washers and tighten them to the torque rating specified in Table 5.
5. Position the driveshaft with key, leading with the end that is drilled and tapped for the retaining bolt.
6. Install the driveshaft though the adapter and into the gearbox, aligning the key in the driveshaft keyway with the keyway in the output hub of the reducer.

   NOTE: Be extremely careful when sliding adapter section of shaft through seal to prevent seal lips from being damaged or rolled over.
7. Install the shaft retainer, lock washer and bolt, and tighten to the torque rating specified in Table 5.
8. If using the optional adjustable packing adapter, hand-tighten the nuts on the packing retainer then rotate one additional turn with the appropriate tool. Once in operation, these nuts can be retightened if the braided seals wear during normal operation. Braided seals can be replaced as needed.

INSTALLATION

1. Use lifting bracket where applicable to lift reducer.
2. Determine the running positions of the reducer (see Figure 3). Note that the reducer is supplied with six plugs; four around the sides for horizontal installations and one on each face for vertical installations. These plugs must be arranged relative to the running positions as follows:

   Horizontal Installations – Install the magnetic drain plug in the hole closest to the bottom of the reducer. Install the filter/ventilation plug in topmost hole. Of the two remaining plugs on the sides of the reducer, the lowest one is the minimum oil level plug.

   Vertical Installations – Install the filter/ventilation plug in the hole provided in the upper face of the reducer housing as installed. If space is restricted on the upper face, install the vent in the highest hole on the side of the reducer per Figure 3 using the optional vertical vent kit. Install a plug in the hole in the bottom face of the reducer. Do not use this hole for the magnetic drain plug. Install the magnetic drain plug in the lowest hole on the sides of the reducer. Of the remaining holes on the sides of the reducer, use the plug in the upper housing half for the minimum oil level plug.

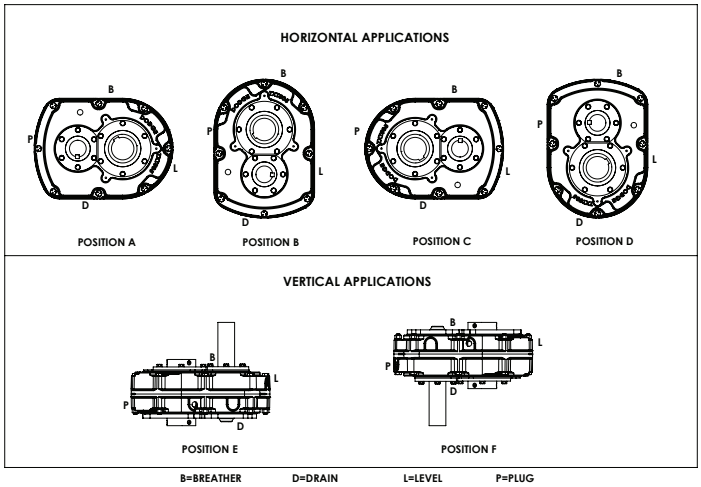


Figure 3 - Mounting Positions

Below 15 RPM output speed, oil level must be adjusted to reach the highest oil level plug. If reducer position is to vary from those shown in Figure 3, either more or less oil may be required. Consult Dodge.

The running position of the reducer in a horizontal application is not limited to the four positions shown in Figure 3. However, if running position is over 20° in position B and D or over 5° in position A and C—either way from sketches—the oil level plug cannot be used safely to check the oil level, unless the reducer is swung to within 20° for position A and C or within 5° for position B and D of the positions shown in Figure 3. Because of the many possible positions of the reducer, it may be necessary or desirable to make special adaptations using the lubrication filling holes furnished along with other standard pipe fittings, stand pipes and oil level gauges as required.

NOTE: If motor mount, motor, and sheaves are to be installed on reducer before mounting screw conveyor drive to trough end, bypass step 3; perform steps 4 and 5, and then return to step 2.

3. Use lifting tab to hoist screw conveyor drive into position. Slide shaft into screw and adapter over trough end studs. Only one set of adapter holes will fit over the trough end studs. If the mounted position of the screw conveyor drive varies more than 15° from any of the four horizontal mounting positions shown in Figure 3, an incorrect set of holes has been selected for coupling adapter to reducer. This can be corrected by removing adapter screws and rotating the reducer to its proper position. Reinstall and tighten adapter screws to torque specified in Table 5. Install lockwashers and tighten nuts on trough end studs. Attach drive shaft to screw.

4. Motor Mount Installation

The motor mount must be installed on the reducer as shown in Figure 4.

Remove the required housing bolts on the side of the reducer. Place the motor mount brackets in position and install the longer housing bolts supplied with the motor mount assembly. Do not fully tighten the housing bolts at this time.

Install the bottom plate to the motor mount brackets and tighten with the hardware provided. Next, tighten the housing bolts to the torque values listed in Table 5.

Install the four adjusting studs to the bottom plate using the jam nuts provided and securely tighten. These nuts will not require any further adjustment. Add one additional jam nut to each stud and thread approximately to the middle of the stud. Install the top motor plate on top of the jam nuts. Assemble the remaining jam nuts on studs to secure top motor plate. Do not fully tighten these nuts yet.

Mount motor, drive and driven sheaves, and V-belts.

NOTE: Mount driven sheave as close to the reducer housing as practical.

Adjust V-belts to the proper tension by adjusting the jam nuts and securely tighten.

Check all bolts to ensure that they are securely tightened.

5. Install sheave on input shaft as close to reducer as practical.

CAUTION: Unit is shipped without oil. Add proper amount of recommended lubricant before operating. Failure to observe this precaution could result in damage to or destruction of the equipment.

6. Fill gear reducer with the recommended volume of lubricant per Table 1.

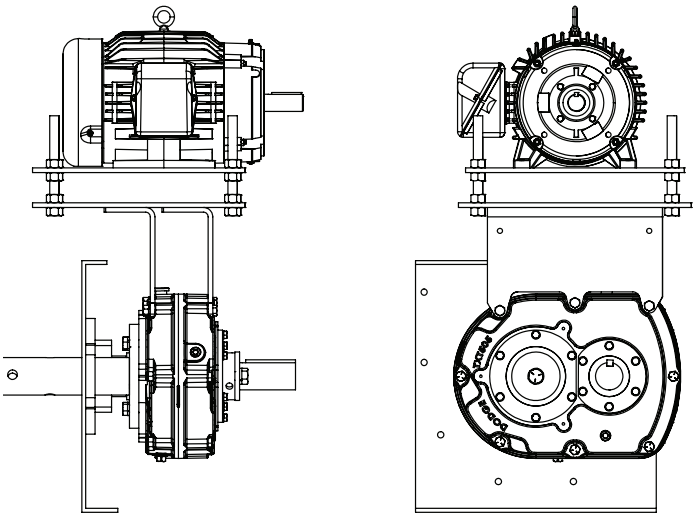


Figure 4 - Complete Drive

LUBRICATION

IMPORTANT: Because Torque-Arm reducers are shipped without oil, it is extremely important to add the proper amount of lubricant prior to operating reducer. For most applications a high-grade petroleum-base rust and oxidation inhibited (R&O) gear oil is suitable. Under severe conditions EP-type oils can be used. See Table 1 for proper oil volume and viscosity requirement.

Follow instructions on reducer warning tags.

Lubrication is very important for satisfactory operation. The proper oil level must be maintained at all times. Frequent inspection, at least monthly, with the unit not running and allowing sufficient time for the oil to cool and the entrapped air to settle out of the oil should be made by removing the level plug and verifying the level is being maintained. If oil level is low, add the proper lubricant until the oil volume is increased to the correct level.

After an initial operation of about two weeks, the oil should be changed. If desired, this oil may be filtered and reused. After the initial break in period, under average industrial operating conditions, the lubricant should be changed every 2,500 hours of operation. At every oil change, drain reducer and flush with kerosene, clean magnetic drain plug and refill to proper level with new lubricant.

Under extreme operating conditions, such as rapid rise and fall of temperature, dust, dirt, chemical particles, chemical fumes, or oil sump temperatures above 200°F, the oil should be changed every one to three months, depending on severity of conditions.

CAUTION: Too much oil will cause overheating and too little will result in gear failure. Check oil level regularly. Failure to observe this caution could result in bodily injury.

Heating is a natural characteristic of enclosed gearing. A maximum gear case temperature approaching 200°F is not uncommon for some units operating in normal ambient temperatures of 80°F. When operating at the rated capacity with proper lubrication, no damage will result from this temperature.

This maximum temperature was taken into consideration during the design of the reducer.

Table 1–Oil Volumes

Reducer	Approximate Volume of Oil to Fill Reducer to Oil Level Plug ① ④					
	② Position A	② Position B	② Position C	② Position D	② Position E	② Position F
Size	③ Qt	③ Qt	③ Qt	③ Qt	③ Qt	③ Qt
(H)SCXT305E	7/8	1-1/2	1-3/8	1-3/8	2-1/2	3-1/8
(H)SCXT405E	1-1/2	2-1/4	2-1/8	1-7/8	4	4-7/8
(H)SCXT505E	3-3/8	4-1/4	3-7/8	3-3/4	7-3/4	9
SCXT605E	4-1/2	5-3/4	4-1/2	5	12	11
SCXT705E	7-1/2	9	7-1/2	9-1/4	19	17-1/4

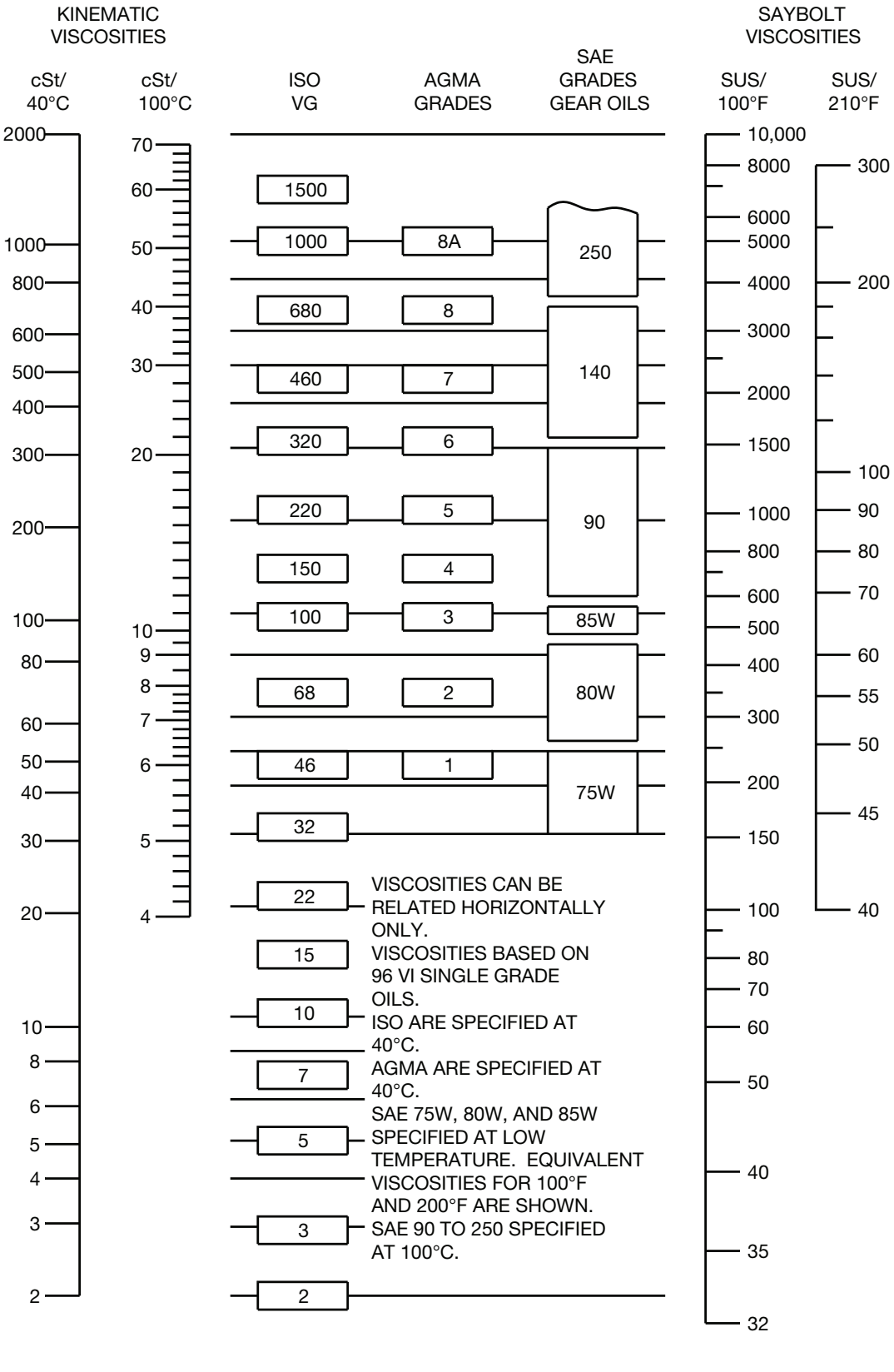
① Oil quantity is approximate. Service with lubricant until oil runs out of oil level hole.
② Refer to Figure 3 for mounting positions.
③ US measure: 1 quart = 32 fluid ounces = .94646 liters.
④ Below 15 RPM output speed, oil level must be adjusted to reach the highest oil level plug. If reducer position is to vary from those shown in Figure 1, either more or less oil may be required. Consult Dodge.

Table 2–Oil Recommendations

ISO Grades For Ambient Temperatures of 50°F to 125°F (Refer to notes below)					
Output RPM					
	(H)SCXT305E	(H)SCXT405E	(H)SCXT505E	SCXT605E	SCXT705E
301–400	220	220	220	220	220
201–300	220	220	220	220	220
151–200	220	220	220	220	220
126–150	320	220	220	220	220
101–125	320	320	220	220	220
81–100	320	320	320	220	220
41–80	320	320	320	220	220
11–40	320	320	320	320	320
1–10	320	320	320	320	320
ISO Grades For Ambient Temperatures of 15°F to 60°F (Refer to notes below)					
Output RPM					
	(H)SCXT305E	(H)SCXT405E	(H)SCXT505E	SCXT605E	SCXT705E
301–400	150	150	150	150	150
201–300	150	150	150	150	150
151–200	150	150	150	150	150
126–150	220	150	150	150	150
101–125	220	220	150	150	150
81–100	220	220	220	150	150
41–80	220	220	220	150	150
11–40	220	220	220	220	220
1–10	220	220	220	220	220

Notes:
1. Assumes auiliary cooling where recommended in the catalog
2. Pour point of lubricant selected should be at least 10°F lower than expected minimum ambient starting temperature
3. Extreme pressure (EP) lubricants are not necessary for average operating conditions
4. Special lubricants may be required for food and drug industry applications where contact with the product being manufactured may occur. Consult a lubrication manufacturer's representative for their recommendations.
5. For reducers operating in ambient temperatures between -22°F (-30°C) and 20°F (-6.6°C), use a synthetic hydrocarbon lubricant, ISO100 grade or AGMA 3 grade (for example, Mobil SHC627). Above 125°F (51°C), consult Dodge Application Engineering at +1 864 284 5700 for lubrication recommendation.

OIL VISCOSITY EQUIVALENCY CHART



GUIDELINES FOR (H)SCXT REDUCER LONG-TERM STORAGE

During periods of long storage, or when waiting for delivery or installation of other equipment, special care should be taken to protect a gear reducer to have it ready to be in the best condition when placed into service.

By taking special precautions, problems such as seal leakage and reducer failure due to lack of lubrication, improper lubrication quantity, or contamination can be avoided. The following precautions will protect gear reducers during periods of extended storage:

Preparation

1. Drain oil from the unit. Add a vapor phase corrosion inhibiting oil (VCI-105 oil by Daubert Chemical Co.) in accordance with Table 3.
2. Seal the unit airtight. Replace the vent plug with a standard pipe plug and wire the vent to the unit.
3. Cover all unpainted exterior parts with a waxy rust preventative compound that will keep oxygen away from the bare metal (Non-Rust X-110 by Daubert Chemical Co. or equivalent).
4. The instruction manuals and lubrication tags are paper and must be kept dry. Either remove these documents and store them inside, or cover the unit with a durable waterproof cover which can keep moisture away.
5. Protect reducer from dust, moisture, and other contaminants by storing the unit in a dry area.
6. In damp environments, the reducer should be packed inside a moisture-proof container or an envelope of polyethylene containing a desiccant material. If the reducer is to be stored outdoors, cover the entire exterior with a rust preventative.

When Placing the Reducer into Service

1. Fill the unit to the proper oil level using a recommended lubricant. The VCI oil will not affect the new lubricant.
2. Clean the shaft extensions with petroleum solvents.
3. Assemble the vent plug into the proper hole.

Follow the installation instructions provided in this manual.

Table 3 – Quantities of VCI #105 Oil

Reducer Size	Quantity (Ounces / Milliliter)
(H)SCXT305E	1 / 30
(H)SCXT405E	1 / 30
(H)SCXT505E	1 / 30
SCXT605E	2 / 59
SCXT705E	2 / 59

REPLACEMENT OF PARTS

IMPORTANT: Using tools normally found in a maintenance department, a Dodge (H)SCXT speed reducer can be disassembled and reassembled by careful attention to the instructions following.

Cleanliness is very important to prevent the introduction of dirt into the bearings and other parts of the reducer. A tank of clean solvent, an arbor press, and equipment for heating bearings and gears (for shrinking these parts on shafts) should be available.

The oil seals are contact lip seals. Considerable care should be used during disassembly and reassembly to avoid damage to the surface on which the seals rub.

The keyseat in the input shaft, as well as any sharp edges on the output hub should be covered with tape or paper before disassembly or reassembly. Also, be careful to remove any burrs or nicks on surfaces of the input shaft or output hub before disassembly or reassembly.

Ordering Parts: When ordering parts for reducer, specify reducer size number, reducer model number, part name, part number, and quantity.

It is strongly recommended that, when a pinion or gear is replaced, the mating pinion or gear is replaced as well. If the large gear on the output hub must be replaced, it is recommended that an output hub assembly consisting of a gear assembled on a hub be ordered to ensure undamaged surfaces on the output hub where the output seals rub. However, if it is desired to use the old output hub, press the gear and bearing off and examine the rubbing surface under the oil seal carefully for possible scratching or other damage resulting from the pressing operation. To prevent oil leakage at the shaft oil seals, the smooth surface of the output hub must not be damaged.

If any parts must be pressed from a shaft or from the output hub, this should be done before ordering parts to make sure that none of the bearings or other parts are damaged in removal. Do not press against rollers or cage of any bearing.

Because old shaft oil seals may be damaged in disassembly, it is advisable to order replacements for these parts.

Removing Screw Conveyor Drive from Trough End

Disconnect an electrical power to the drive. Drain lubricant from reducer. Uncouple drive shaft and screw. Remove nuts from trough end studs. Support drive by means of hoist and carefully pull unit away from trough end to slide drive shaft out of screw.

Disassembly

1. Remove retainer bolt, lockwasher, and shaft retainer from drive shaft. Pull drive shaft out of reducer from adapter side. Remove adapter.
2. Position the reducer on its side and remove all housing bolts. Drive dowel pins from housing. Using the three pry slots around the periphery of the flange, gently separate the housing halves. Open housing evenly to prevent damage to the parts inside.
3. Lift input shaft, all gear assemblies, and bearing assemblies from housing.
4. Remove seals from housing.
5. Remove bearings from shafts and hubs. Be careful not to scratch or damage any assembly or seal area during bearing removal. The hub assembly can be disassembled for gear replacement but if scratching or grooving occurs on the hub, seal leakage will occur and the hub will need to be replaced.

Reassembly

1. **Output Hub Assembly:** Heat gear to 325°F to 350°F to shrink onto hub. Heat bearings to 270°F to 290°F to shrink onto hub. Any damage to the hub surfaces where the oil seals rub will cause leakage, making it necessary to replace the hub.
2. **Input Shaft Assembly:** Heat bearings 270°F to 290°F to shrink onto shaft. Press bearings on shaft.
3. Drive the two dowel pins into place in the right-hand housing half (backstop side).
4. Place right-hand housing half on blocks to allow for protruding end of output hub.
5. Install all bearing cups in right-hand housing half, making sure they are properly seated.
6. Mesh the output hub gear and input shaft assembly together and set in place in housing. Make sure bearing rollers (cones)

are properly seated in their cups. Set bearing cups for left-hand housing half in place on their rollers.

7. Make sure both housing halves are clean and free of RTV residue. For (H)SCXT 505E through 705E, apply a continuous 1/8" diameter bead of Dow Corning RTV732 sealant on the flange surface of the right-hand housing (make sure RTV is placed around all bolt holes). Do not apply RTV sealant to (H)SCXT 305E and 405E reducers at this time. Set the left-hand housing half in position onto the dowel pins and gently tap with a soft hammer until housing bolts can be used to draw housing halves together. Make sure reducer shafts do not bind when tightening housing bolts. Torque housing bolts per torque values listed in Table 5.
8. For (H)SCXT sizes 305E and 405E, rotate the input shaft and set all bearings with a soft hammer. Using a magnetic base and indicator, measure and record the endplay of the input shaft and output hub. Remove the left housing half and shim behind the bearing cup as required to achieve the correct bearing endplay per Table 4. Repeat this process and check endplay until proper endplay is obtained.
9. For (H)SCXT sizes 505E through 705E, install the output seal carrier and draw down with two bolts 180° apart to 50 inch-pounds of torque. Loosen both bolts then retighten finger-tight only. Measure the clearance between the housing and carrier flange at each bolt and average the two values. Add 0.010" to the average reading and make up shim pack. Install shim pack between the carrier flange and reducer housing. Torque the bolts to the value shown in Table 6. Using a magnetic base and dial indicator, check the axial endplay reading of the output hub is per Table 4.
10. For (H)SCXT 305E and 405E reducers, follow assembly instructions for housing halves, including sealant, then continue to step 11. For (H)SCXT 505E through 705E reducers, repeat step 9 for installing and adjusting the input bearings. Adjust the axial endplay per Table 4 then continue to step 10.
11. Install input and output seals. Lightly coat the seal lips with Mobilith AW2 All-Purpose grease or equivalent. The possibility of damage and consequent oil leakage can be decreased by covering all sharp edges with tape prior to seal installation. Seals should be pressed or tapped with a soft hammer evenly into place in the reducer housing, applying pressure only on the outer edge of the seals.

    NOTE: Extreme care should be used when installing seals to avoid damage due to contact with sharp edges on the input shaft or output hub. A slight oil leak at the seals may be evident during initial running but should disappear unless seals have been damaged.
12. Install backstop cover. Make sure all bolts, if applicable, are tightened to the correct torque values listed in Table 5.

Table 4–Bearing Adjustment Tolerances

Reducer Size	Bearing Endplay Values	
	Input	Output
(H)SCXT305E	.002–.004 Loose	.0005–.003 Loose
(H)SCXT405E	.002–.004 Loose	.0005–.003 Loose
(H)SCXT505E	.002–.004 Loose	.0005–.003 Loose
SCXT605E	.002–.004 Loose	.0005–.003 Loose
SCXT705E	.002–.004 Loose	.0005–.003 Loose

Table 5–Recommended Bolt Torque Values

Recommended Torque Values (ft-lbs)				
Reducer Size	Housing Bolts	Output Seal Carrier	Input Seal Carrier	Hydroil Motor Adapter
(H)SCXT305E	45–50	N/A	N/A	27–30
(H)SCXT405E	45–50	N/A	N/A	27–30
(H)SCXT505E	68–75	27–30	27–30	27–30
SCXT605E	68–75	27–30	27–30	N/A
SCXT705E	135–150	45–50	45–50	N/A

Recommended Torque (ft-lbs)			
Reducer Size	Drive Shaft	Adapter Bolts	Backstop Cover
(H)SCXT305E	234–260	68–75	N/A
(H)SCXT405E	234–260	135–150	N/A
(H)SCXT505E	234–260	135–150	N/A
SCXT605E	576–640	135–150	7–8
SCXT705E	576–640	135–150	7–8

Table 6–Part Numbers for Replacement Bearings, Single Reduction Reducers

Reducer Size	Output Hub Bearing – Both Sides	Input Shaft Bearing – LH Input Side	Input Shaft Bearing – RH Backstop Side
	Dodge Part Number	Dodge Part Number	Dodge Part Number
(H)SCXT305E	Cone - 402272 Cup - 403127	Cone - 402190 Cup - 403132	Cone - 402271 Cup - 403101
(H)SCXT405E	Cone - 402268 Cup - 403163	Cone - 402179 Cup - 403006	Cone - 402285 Cup - 403125
(H)SCXT505E	Cone - 402193 Cup - 403016	Cone - 402270 Cup - 403026	Cone - 402266 Cup - 403073
SCXT605E	Cone - 402050 Cup - 403140	Cone - 402053 Cup - 403106	Cone - 402123 Cup - 403009
SCXT705E	Cone - 402058 Cup - 403111	Cone - 402057 Cup - 403143	Cone - 402078 Cup - 403034

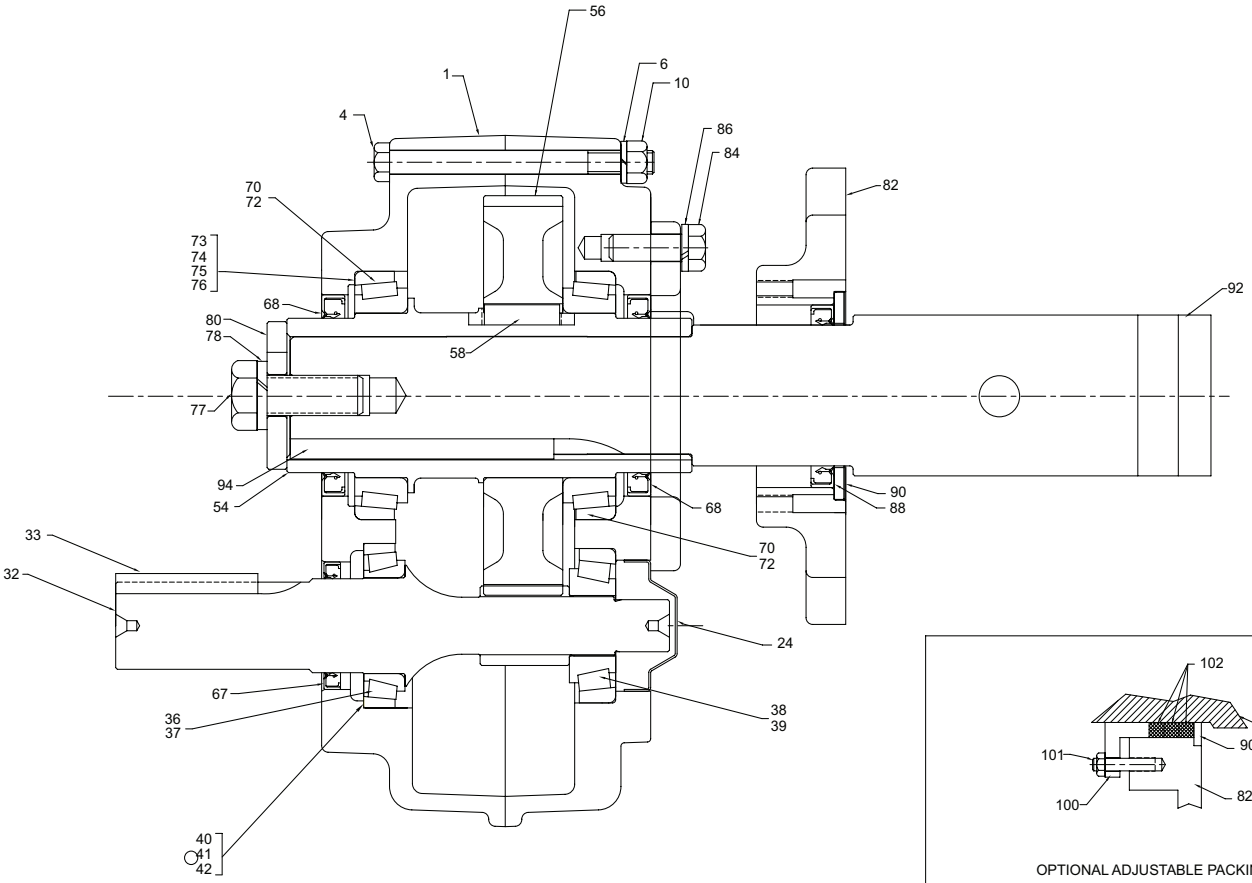
Table 7–Replacement Parts Kit Numbers

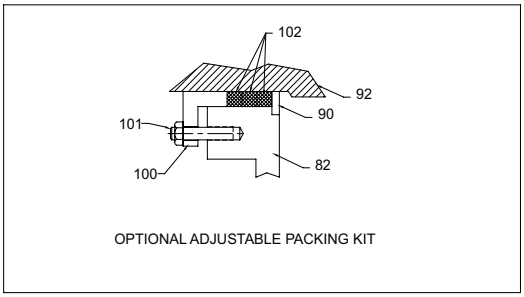
Reducer Size	Seal Kit	Bearing Kit	Complete Shim Kit
(H)SCXT305E	389726	392346	See Parts Breakdown
(H)SCXT405E	389727	392348	See Parts Breakdown
(H)SCXT505E	389728	392351	See Parts Breakdown
SCXT605E	272705	392352	246166
SCXT705E	247345	392354	240121

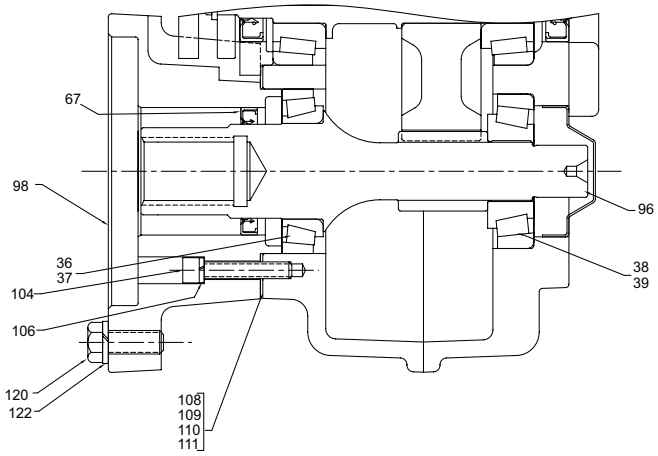
Table 8–Actual Ratios

Reducer Size	Nominal Ratio
	5:1
TXT/HXT305E	5.60
TXT/HXT405E	5.65
TXT/HXT505E	5.67
TXT605E	5.67
TXT705E	5.36

Parts for (H)SCXT 305E and 405E Single Reduction Screw Conveyor and Hydroil Screw Conveyor Drive







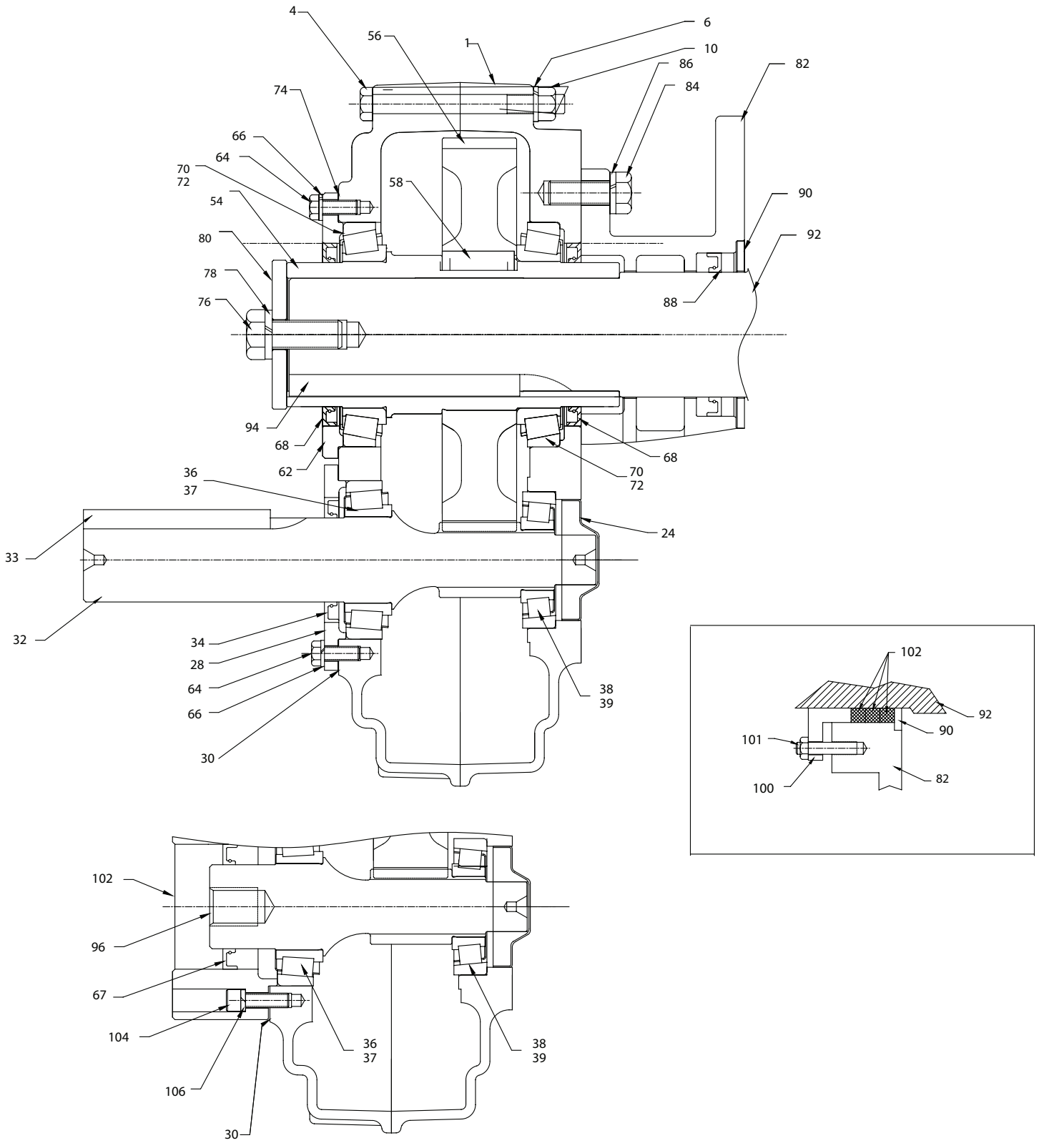
Parts for (H)SCXT 305E and 405E Single Reduction Screw Conveyor and Hydroil Screw Conveyor Drive

Ref.	Description	Qty	(H)SCXT 305E	(H)SCXT 405E
1	Housing Sub-Assembly (SCXT)	1	243278	244724
	Housing Sub-Assembly (HSCXT/HSCXT-6B)	1	243723	244733
①	Air Vent	1	900287	900287
4	Housing Bolt	7	032018040NR	032018044NR
4	Housing Bolt	1	032018044NR	032018048NR
6	Housing Lockwasher	8	034017015AF	034017015AF
10	Housing Nut	8	033102015AM	033102015AM
①	RTV Sealant	1	465044	465044
①	Lifting Lug	1	HA6360	HA6360
①	Dowel Pin	2	420063	420063
①	Magnetic Oil Plug	1	430060	430060
①	Oil Plug	3	430031	430031
①	Smart Sensor Adapter	1	966905	966905
①	Shim Kit			
24	RH Input Bearing Cover	1	253149	254275
32	Input Pinion	1	253170	254230
33	Input Pinion Key	1	443078	443096
36	Input Bearing Cone, Input Side	1	402190	402179
37	Input Bearing Cup, Input Side	1	403132	403006
38	Input Bearing Cone Backstop Side	1	402271	402285
39	Input Bearing Cup Backstop Side	1	403101	403125
40	TXT305 or TXT405 EP Input Shim (0.005")	2	243732	244734
41	TXT305 or TXT405 EP Input Shim (0.007")	1	243733	244735
42	TXT305 or TXT405 EP Input Shim (0.015")	1	243734	244736
54	Output Hub - Straight Bore	1	243557	244589
56	Output Gear	1	243570	244188
58	Output Gear Key	1	243216	354087
	Seal Kit ②	1	389726	389727
67	Input Pinion Shaft Seal ③	1	351123	334277
68	Output Hub Oil Seal ③	2	902286	A73109
70	Output Bearing Cone	2	402272	402268
72	Output Bearing Cup	2	403127	403163
73	TXT3 Output Shim (0.005")	2	243633	244308
74	TXT3 Output Shim (0.007")	1	243634	244309
75	TXT3 Ouput Shim (0.015")	1	243635	244310
76	TXT3 Output Bearing Spacer	1	243636	244311
77	Retainer Bolt	1	032020016FP	032020016FP
78	Lockwasher	1	034017020AB	034017020AF
80	Driveshaft Retainer	1	353053ZP	353088ZP
	Adapter Assembly ②	1	353047	354121
82	Adapter ③	1	356164	356150
84	Bolt ③	4	032018012DR	032018014ER
86	Lockwasher ③	4	034017016AF	034017018AF
88	Lip Seal ③	1	353085	354115
90	Seal Retaining Ring ③	1	353054	354089
94	Driveshaft Key ③	1	443089	443114

Ref.	Description	Qty	(H)SCXT 305E	(H)SCXT 405E
92	**Driveshafts**			
	1-1/2" Diameter	1	243562	244594
	2" Diameter	1	243563	244595
	2-7/16" Diameter	1	243564	244596
	3" Diameter	1	243565	244597
	3-7/16" Diameter	1	---	244598
	Adjustable Packing Kit ②	1	356303	356304
100	Adjustable Packing Retainer ③	1	356166	356152
101	SCXT/TAII Adjustable Packing Hardware Kit③	1	356308	356308
102	AC3 or AC4 Packing Rings (3 Pack) ③	1	427658PK3	427664PK3
96	Std Hydroil Input Pinion (HSCXT)	1	253171	254231
	Hydroil 6B Input Pinion (HSCXT-6B)	1	253141	---
98	Std Hydroil Motor Adapter (HSCXT)	1	253172	254222
	Hydroil Motor Adapter (HSCXT-6B)	1	253142	---
104	Adapter Screw, HSCXT	④	032130014BF	032130018CF
	Adapter Screw, HSCXT-6B	④	032130008BF	----
106	Adapter Lockwasher	④	034020013AE	034020014AE
108	HSCXT Input Shim (0.002")	2	427853	254226
109	HSCXT Input Shim (0.005")	1	427854	254227
110	HSCXT Input Shim (0.010")	1	427855	254228
111	HSCXT Input Shim (0.025")	1	427856	254229
120	Hydroil Motor to Adapter Screw (HSCXT)	4	032018012DR	032018012DR
	Hydroil Motor to Adapter Screw (HSCXT-6B)	4	032018012DR	----
122	Hydroil Motor to Adapter Lock-washer (HSCXT)	3	034017016AF	034017016AF
	Hydroil Motor to Adapter Lock-washer (HSCXT-6B)	2	034017016AF	

① Not shown on drawing
② Includes parts listed immediately below
③ Makes up assembly under which it is listed
④ 4 Required for HSCXT305E, 6 required for TXT405E

Parts for (H)SCXT 505E Double Reduction Screw Conveyor and Hydroil Screw Conveyor Drive



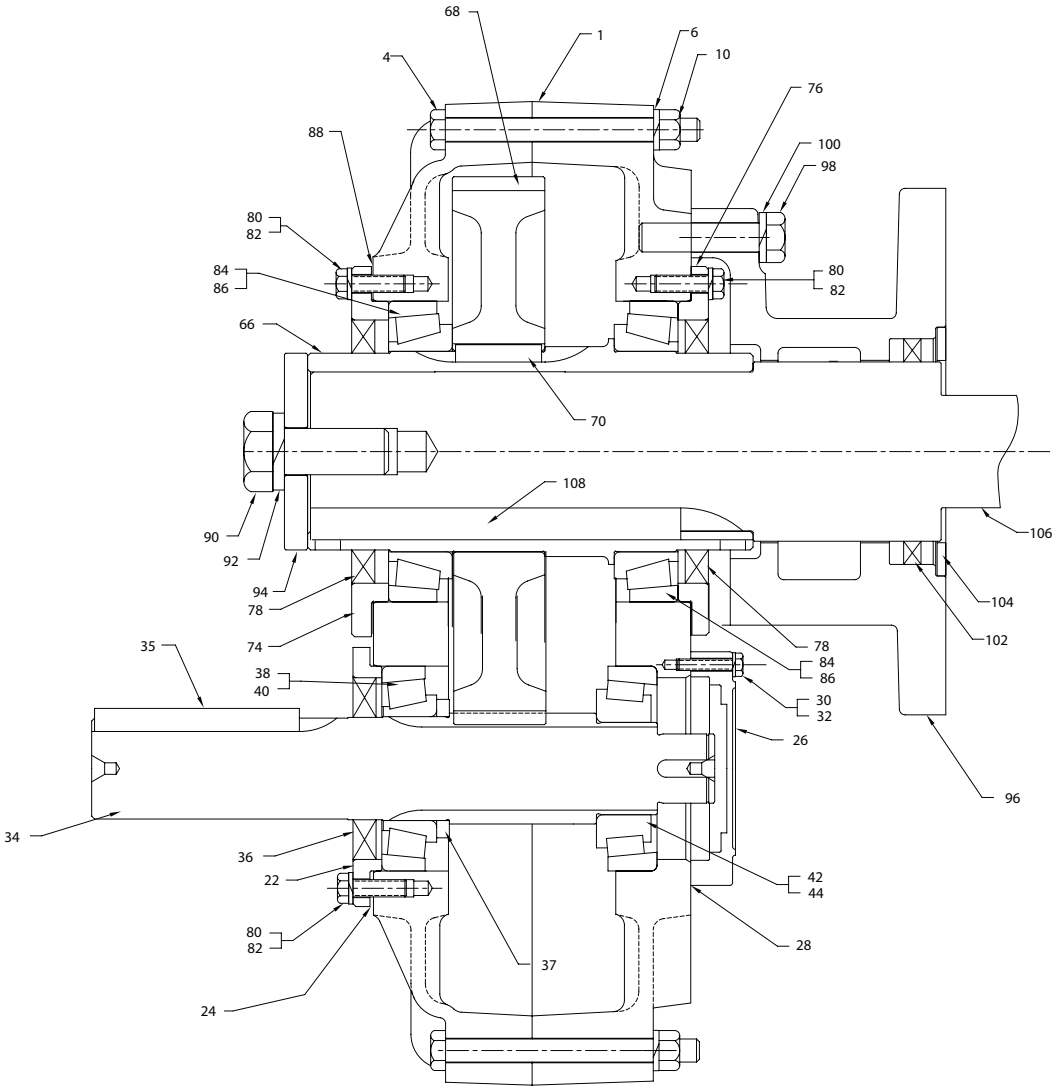
Parts for (H)SCXT 505E Double Reduction Screw Conveyor and Hydroil Screw Conveyor Drive

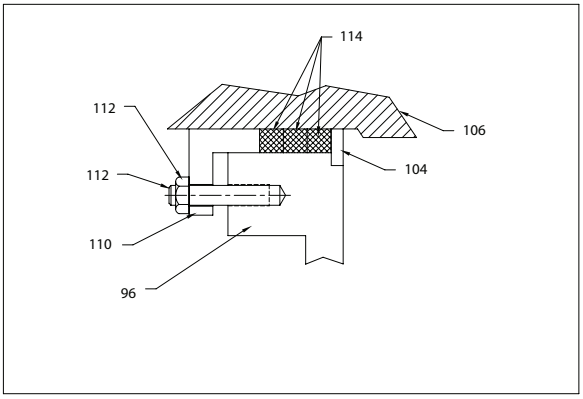
Ref.	Description	Qty	(H)SCXT505E
1	Housing Sub-Assembly (SCXT/HSCXT)	1	245682
①	Air Vent	1	904287
4	Housing Bolt	7	032018040DR
4	Housing Bolt	1	032018044DR
6	Housing Lockwasher	8	034017016AF
10	Housing Nut	8	033102016AM
①	RTV Sealant	1	465044
①	Lifting Lug	1	HA6360
①	Dowel Pin	2	304624
①	Magnetic Oil Plug	1	430062
①	Oil Plug	3	430033
①	Smart Sensor Adapter	1	966906
24	Input RH Bearing Cover	1	245624
28	Input Shaft Seal Carrier	1	255224
30	Input Shim Pack	2 sets	389725
32	Input Pinion	1	255221
33	Input Pinion Key	1	443096
①	Seal Kit ②	1	389728
34	Input Pinion Shaft Seal ③	1	245546
68	Output Hub Oil Seal ③	2	904286
36	Input Bearing Cone, Input Side	1	402270
37	Input Bearing Cup, Input Side	1	403026
38	Input Bearing Cone Backstop Side	1	402266
39	Input Bearing Cup Backstop Side	1	403073
54	Output Hub	1	245591
56	Output Gear	1	245186
58	Output Gear Key	1	355064
62	Output Seal Carrier	1	255236
64	Seal Carrier Bolt	12	032018008CR
66	Seal Carrier Lock-washer	12	034017014AF
70	Output Bearing Cone	1	402193
72	Output Bearing Cup	1	403016
74	Output Hub Shim Pack	1 set	245139
76	Drive Shaft Bolt	1	032020016FP
78	Drive Shaft Lockwasher	1	034017020AF
80	Drive Shaft Retainer	1	355065ZP
	Adapter Assembly ②	1	355072
82	Adapter ③	1	356159
84	Bolt ③	4	032018014ER
86	Lockwasher ③	4	034017018AF
88	Lip Seal ③	1	355067
90	Seal Retaining Ring ③	1	355066
94	Driveshaft Key ③	1	443239

Ref.	Description	Qty	(H)SCXT505E
	Driveshafts		
92	2" Diameter	1	355175
	2-7/16" Diameter	1	355176
	3" Diameter	1	355177
	3-7/16" Diameter	1	355178
	Adjustable Packing Kit ②	1	356305
100	Adjustable Packing Retainer ③	1	356101
101	SCXT/TAII Adjustable Packing Hardware Kit③	1	356308
102	AC5 Packing Rings (3 Pack) ③	1	427674PK3
96	Hydroil Input Pinion	1	255222
102	Hydraulic (Hydroil) Motor Adapter	1	255226
104	Adapter Screw, HSCXT	6	032130018CF
106	Lock-washer, HSCXT	6	034020014AE
①	Hydroil Motor to Adapter Screw	4	032018012DR
①	Hydroil Motor to Adapter Lock-washer	4	034017016AF

① Not shown on drawing
② Includes parts listed immediately below
③ Makes up assembly under which it is listed

Parts for SCXT 605E and 705E Single Reduction Screw Conveyor and Hydroil Screw Conveyor Drive





Parts for SCXT 605E and 705E Single Reduction Screw Conveyor and Hydroil Screw Conveyor Drive

Ref.	Description	Qty	SCXT605E	SCXT705E
1	Housing Sub-Assembly (SCXT)	1	246793	247679
4	Housing Bolt	6	032018044DR	032018048FR
4	Housing Bolt	2	032018048DR	032018052FR
6	Lock-washer	8	034017016AF	034017020AF
10	Hex Nut	8	033102016AM	033102020AM
①	RTV Sealant	1	465044	465044
①	Air Vent	1	904287	904287
①	Air Vent Adapter	1	---	430079
①	Dowel Pin	2	304624	304624
①	Lifting Lug	2	HA6360	021789
①	Magnetic Oil Plug	1	430062	430064
①	Oil Plug	4	430033	430035
①	Smart Sensor Adapter	1	966906	966907
22	Input Shaft Seal Carrier	1	246184	257045
	Shim Kit ②	1 set	246166	240121
24	Input Shim Pack	③	③	③
88	Output Shim Pack	③	③	③
26	Backstop Cover	1	246221	247221
	Seal Kit ②	1	272705	247345
28	Backstop Cover Gasket ③	1	246220	246220
36	Input Pinion Shaft Seal ③	1	256032	242113
78	Output Hub Oil Seal ③	2	905286	247310
30	Backstop Cover Screw	6	032018010AR	032018008AR
32	Backstop Cover Lock-washer	6	034017012AF	034017012AF
34	Input Pinion	1	256028	257044
35	Input Pinion Key	1	443113	443127
37	Input Bearing Spacer, Input Side	1	256030	---
38	Input Bearing Cone, Input Side	1	402053	402057
40	Input Bearing Cup, Input Side	1	403106	403143
42	Input Bearing Cone Backstop Side	1	402123	402078
44	Input Bearing Cup Backstop Side	1	403009	403034
	Output Hub Assembly ②	1	390988	390990
66	Output Hub ③	1	246338	247338
68	Output Gear ③	1	246295	247215
70	Output Gear Key ③	2	245217	245217
74	Output Hub Seal Carrier, Input Side	1	246187	247315
76	Output Hub Seal Carrier, Backstop Side	1	246186	247315
80	Seal Carrier Bolt	④	032018010CR	032018010NR
82	Seal Carrier Lock-washer	④	034017014AF	034017015AF
84	Output Bearing Cone	2	402050	402058
86	Output Bearing Cup	2	403140	403111
90	Driveshaft Retainer Bolt	1	032020020HP	032020020HP
92	Driveshaft Retainer Lockwasher	1	034017024AF	034017024AF
94	Driveshaft Retainer	1	356047	356191
	Adapter Assembly ②	1	356055	356187
96	Adapter ③	1	356155	356193
98	Bolt ③	4	032018020ER	032018024FR
100	Lockwasher ③	4	034017018AF	034017020AF
102	Lip Seal ③	1	355054	355054
104	Seal Retaining Ring ③	1	356054	356054
108	Driveshaft Key ③	1	443288	443288
	Driveshafts			
106	2-7/16" Diameter	1	356042	356182
	3" Diameter	1	356043	356183
	3-7/16" Diameter	1	356044	356184
	Adjustable Packing Kit ②	1	356306	356306
110	Adjustable Packing Retainer ③	1	356157	356157
112	SCXT/TAII Adjustable Packing Hardware Kit③	1	356308	356308
114	AC6/AC7 Packing Rings (3 Pack) ③	1	427687PK3	427687PK3

① Not shown on drawing
② Includes parts listed immediately below
③ Makes up assembly under which it is listed
④ 18 Required for TXT605E, 22 Required for TXT705E

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