

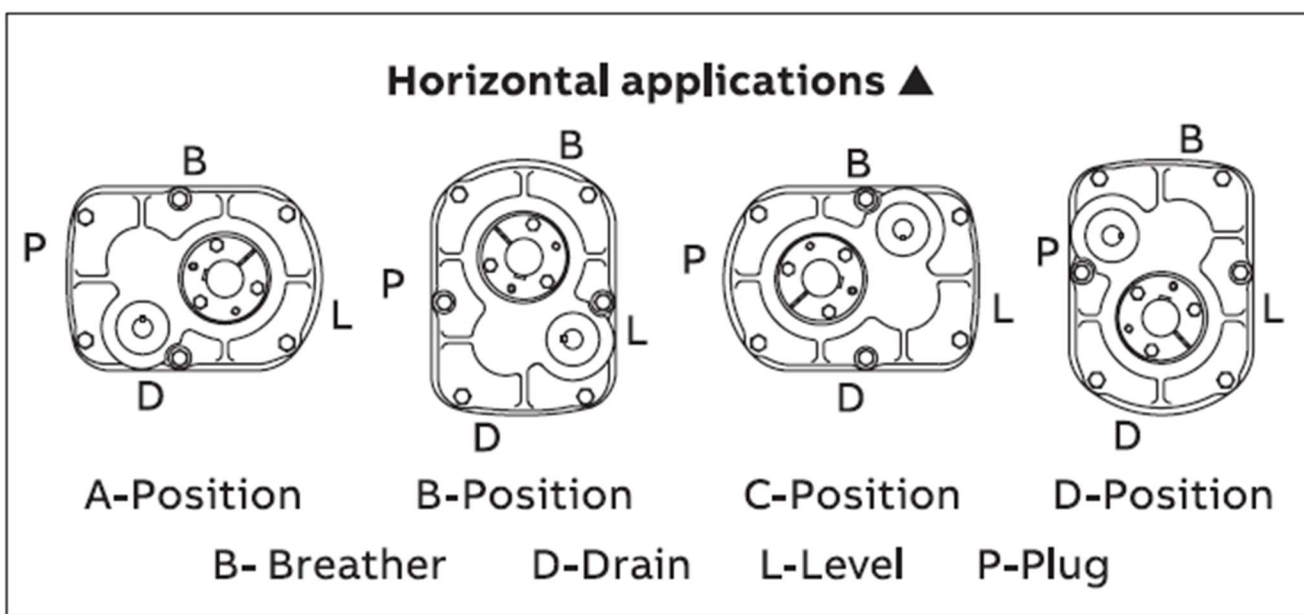
## Dodge TXT/SCXT Reducers: Motor Mount Styles

### Introduction:

Dodge offers various motor mounts for the different sizes of TXT and SCXT gearboxes. There are always several questions asked each year about certain motor mounts. For example, “Can a certain motor mount be used with a certain reducer? If so, in what position?” This whitepaper will try and answer all those questions.

See the figure below which shows Dodge standard horizontal mounting positions for TXT and SCXT.

Horizontal position means that the pulley shaft or screw conveyor shaft that the gearbox is driving is parallel to the ground. These positions are called out when looking at the input shaft side of the reducer.



Most shaft-mounted TXT reducers are put in Position B and most SCXT reducers are mounted in Position C. They don't have to necessarily be mounted in these positions, but these are the most common.

With this in mind, and most people want the motor to be mounted on top, that is how Dodge motor mounts were designed.

## Motor Mount Styles:

There are 5 styles of motor mounts that are used for these gearboxes:

1. Torque-Arm Standard Motor Mounts (TA1M-TA7M, TA8-TA15, some specials for larger motors)
2. Torque-Arm Long Motor Mounts (TA3ML-TA7ML)
3. Torque-Arm Bottom Motor Mounts (TAB1-TAB10)
4. SCXT Standard Motor Mounts (M112, M214, M316, M418, M518, M620, M720, some specials for larger motors)
5. SCXT Long Motor Mounts (M120L, M220L, M320L, M424L, M524L, M624L, M724L, M824L)

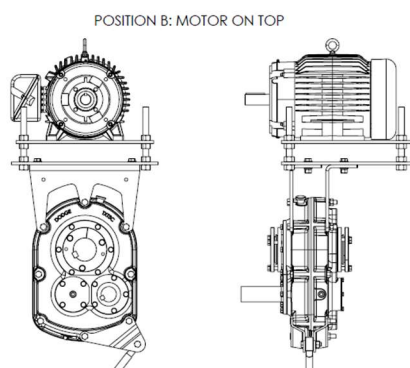
Since the housing bolt pattern doesn't change from TXT to SCXT, any of these motor mounts can be used on TXT or SCXT for the proper size reducer (i.e. a TXT5 motor mount can be used on an SCXT5 reducer or vice versa)

See the table on the last few pages for a list of Dodge motor mounts and the products they can be used on.

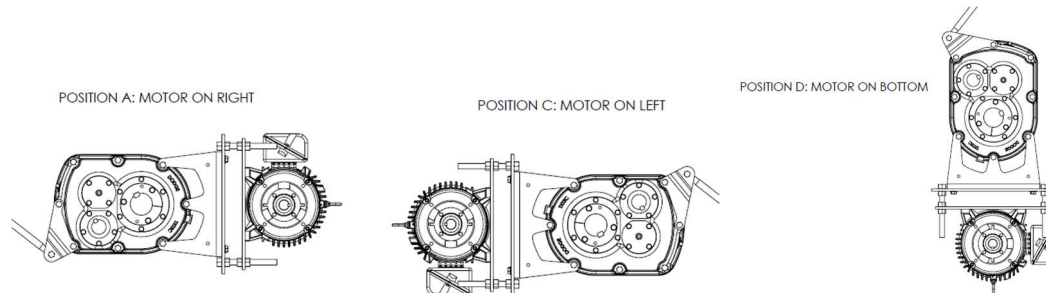
## Torque-Arm Standard Motor Mounts

TA1M-TA7M:

- Designed that motor would be on top when reducer is mounted in Position B
- Used with standard vertical supports
- Used with a solid top plate to bolt motor to
- Motor mount only designed to be bolted to certain housing holes



Also, can be used in the following positions:

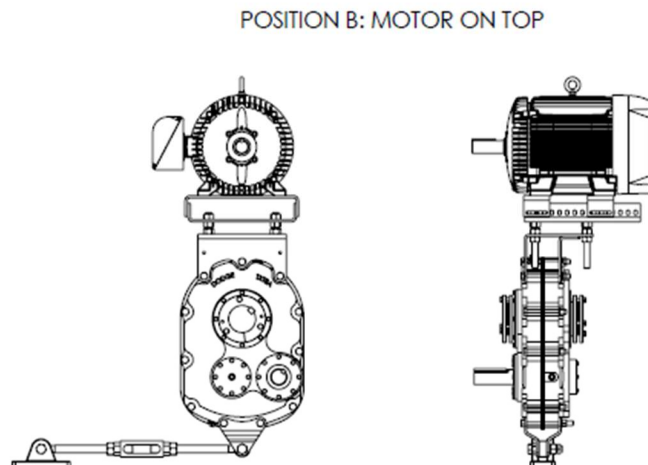


Notes:

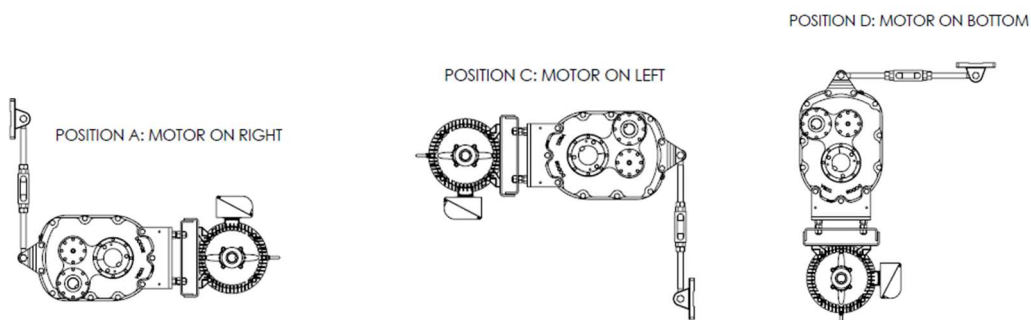
1. In Positions A and C, these positions can create more loads that the tie rod, pulley shaft, or screw conveyor trough end will have to withstand.
2. Dodge doesn't recommend any motors over 326T (50HP) to be mounted on motor mounts in Positions A or C.
3. Also, in Positions A and C, try keeping the belt center distance towards the low limit of what the motor mount allows

TA8-TA15:

- Same as TA1M-TA7M except used with two slotted runners to bolt motor to



Also, can be used in the following positions (see note 4):



Notes:

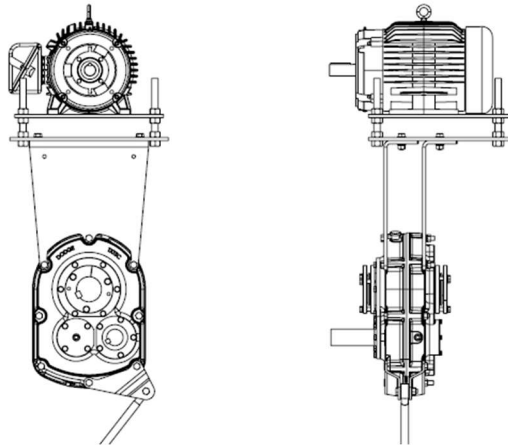
1. In Positions A and C, these positions can create more loads that the tie rod, pulley shaft, or screw conveyor trough end will have to withstand.
2. Dodge doesn't recommend any motors over 326T (50HP) to be mounted on motor mounts in Positions A or C.
3. Also, in Positions A and C, try keeping the belt center distance towards the low limit of what the motor mount allows
4. Not recommended to use TA12-TA15 motor mounts in Positions A, C, or D

**Torque-Arm Long Motor Mounts**

TA3ML-TA7ML:

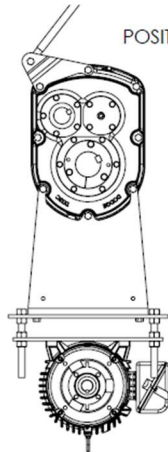
- Designed that motor would be on top when reducer is mounted in Position B
- Used with longer vertical supports to clear larger pulleys or obstructions
- Used with solid top plate to bolt motor to
- Motor mount only designed to be bolted to certain housing holes

POSITION B: MOTOR ON TOP



Also, can be used in the following positions:

POSITION D: MOTOR ON BOTTOM



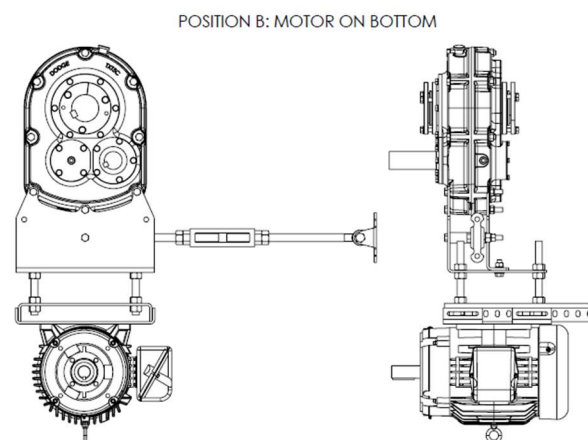
Notes:

Not recommended in Positions A or C

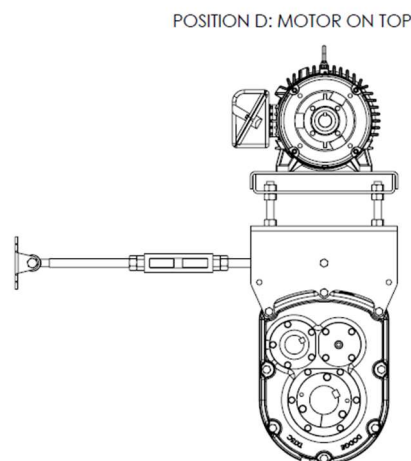
## Torque-Arm Bottom Motor Mounts

TAB1-TAB10:

- Designed that motor would be on bottom when reducer is mounted in Position B
- Uses vertical supports that have 3 additional holes to choose from so that tie rod can be attached to the motor mount instead of to the reducer.
- Used with two slotted runners to bolt motor to
- Motor mount only designed to be bolted to certain housing holes



Also, can be used in the following positions:



Notes:

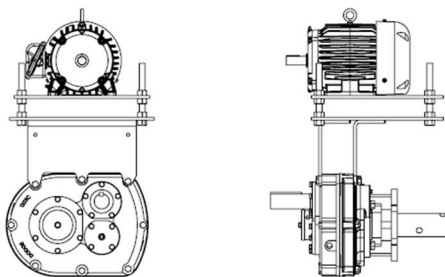
Could be used in Positions A or C, but probably is more cost/lead time effective to use different motor mount.

### SCXT Standard Motor Mounts

M112, M214, M316, M418, M518, M620, M720:

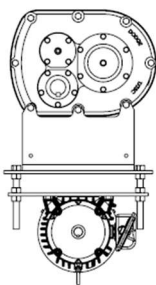
- Designed that motor would be on top when reducer is mounted in Position C
- Used with standard vertical supports to clear Screw Conveyor U-Trough Ends
  - Last two numbers show the largest screw it will clear (i.e. M214 is for SCXT 2 and 14" screw max)
  - Screws with flared trough ends may require the SCXT Long Motor Mount
- Used with solid top plate to bolt motor to
- Motor mount only designed to be bolted to certain housing holes

POSITION C: MOTOR ON TOP

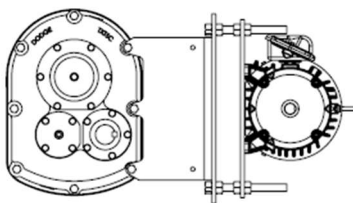


Also, can be used in the following positions:

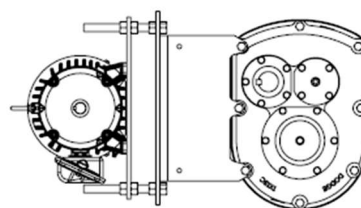
POSITION A: MOTOR ON BOTTOM



POSITION B: MOTOR ON RIGHT



POSITION D: MOTOR ON LEFT



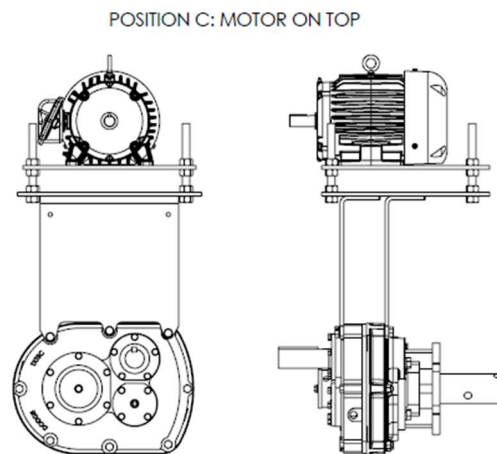
#### Notes:

1. In Positions B and D, these positions can create more loads that the tie rod, pulley shaft, or screw conveyor trough end will have to withstand.
2. Dodge doesn't recommend any motors over 326T (50HP) to be mounted on motor mounts in Positions B or D.
3. Also, in Positions B and D, try keeping the belt center distance towards the low limit of what the motor mount allows

## SCXT Long Motor Mounts

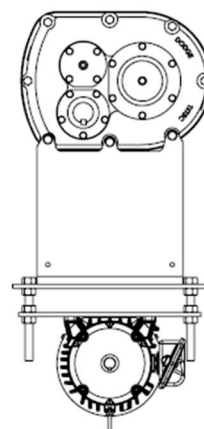
M120L, M220L, M320L, M424L, M524L, M624L, M724L, M824L:

- Designed that reducer is mounted in Position C and that motor is mounted on top
- Used with long vertical supports to clear larger Screw Conveyor U-Trough and Flared Trough Ends
  - Last two numbers show the largest screw it will clear (i.e. M220L is for SCXT 2 and 20" screw max)
- Used with solid top plate to bolt motor to
- Motor mount only designed to be bolted to certain housing holes



Also, can be used in the following positions:

POSITION A: MOTOR ON BOTTOM





Notes:

1. Not recommended in Positions B or D

Available Motor Mounts for TXT/SCXT

Motor Mounts that can be used with TXT105, TXT109, TXT115, TXT125, SCXT105, SCXT109, SCXT115, and SCXT125			
Motor Mount P/N	Description	Gearbox Position that motor will be on top	NEMA Motor Frames
241391	TA1M Standard Motor Mount	B	56-215T
241421	TAB1 Bottom Motor Mount	D	56-215T
351069	M112 Standard Motor Mount	C	56-215T
272625	M120L Long Motor Mount	C	56-215T

Motor Mounts that can be used with TXT205, TXT209, TXT215, TXT225, SCXT205, SCXT209, SCXT215, and SCXT225			
Motor Mount P/N	Description	Gearbox Position that motor will be on top	NEMA Motor Frames
241391	TA1M Standard Motor Mount	B	56-215T
242421	TAB2 Bottom Motor Mount	D	56-215T
352069	M214 Standard Motor Mount	C	56-215T
272626	M220L Long Motor Mount	C	56-215T

Motor Mounts that can be used with TXT305, TXT309, TXT315, TXT325, SCXT305, SCXT309, SCXT315, and SCXT325			
Motor Mount P/N	Description	Gearbox Position that motor will be on top	NEMA Motor Frames
243391	TA3M Standard Motor Mount	B	56-215T
243393	TA3M Special Motor Mount	B	254T/256T
243392	TA3ML Long Motor Mount	B	56-215T
243404	TAB3 Bottom Motor Mount	D	143T-286T
353069	M316 Standard Motor Mount	C	56-215T
353070	M316/250T Special Motor Mount	C	254T/256T
272627	M320L Long Motor Mount	C	56-215T

Motor Mounts that can be used with TXT405, TXT409, TXT415, TXT425, SCXT405, SCXT409, SCXT415, and SCXT425			
Motor Mount P/N	Description	Gearbox Position that motor will be on top	NEMA Motor Frames
244391	TA4M Standard Motor Mount	B	143T-286T
244392	TA4ML Long Motor Mount	B	143T-286T
244404	TAB4 Bottom Motor Mount	D	143T-326T
354069	M418 Standard Motor Mount	C	143T-286T
354028	M418/320T Special Motor Mount	C	324T/326T
272628	M424L Long Motor Mount	C	143T-286T

Available Motor Mounts for TXT/SCXT

Motor Mounts that can be used with TXT505, TXT509, TXT515, TXT525, SCXT505, SCXT509, SCXT515, and SCXT525			
Motor Mount P/N	Description	Gearbox Position that motor will be on top	NEMA Motor Frames
245391	TA5M Standard Motor Mount	B	143T-286T
245393	TA5M Special Motor Mount	B	324T/326T
245392	TA5ML Long Motor Mount	B	143T-286T
245405	TAB5 Bottom Motor Mount	D	143T-326T
355169	M518 Standard Motor Mount	C	143T-286T
355168	M518/320T Special Motor Mount	C	324T/326T
272629	M524L Long Motor Mount	C	143T-286T

Motor Mounts that can be used with TXT605, TXT609, TXT615, TXT625, SCXT605, SCXT609, SCXT615, and SCXT625			
Motor Mount P/N	Description	Gearbox Position that motor will be on top	NEMA Motor Frames
246391	TA6M Standard Motor Mount	B	143T-326T
246388	TA6M Special Motor Mount	B	364T
246390	TA6ML Long Motor Mount	B	143T-326T
246392	TAB6 Bottom Motor Mount	D	182T-326T
356069	M620 Standard Motor Mount	C	143T-326T
272630	M624L Long Motor Mount	C	143T-326T

Motor Mounts that can be used with TXT705, TXT709, TXT715, TXT725, SCXT705, SCXT709, SCXT715, and SCXT725			
Motor Mount P/N	Description	Gearbox Position that motor will be on top	NEMA Motor Frames
247395	TA7M Standard Motor Mount	B	143T-365T
247396	TA7ML Long Motor Mount	B	143T-326T
247404	TAB7 Bottom Motor Mount	D	182T-326T
356269	M720 Standard Motor Mount	C	143T-365T
272631	M724L Long Motor Mount	C	143T-326T

Motor Mounts that can be used with TXT805, TXT815, TXT825, SCXT815, and SCXT825			
Motor Mount P/N	Description	Gearbox Position that motor will be on top	NEMA Motor Frames
248401	TA8 Standard Motor Mount	B	213T-365T
248406	TAB8 Bottom Motor Mount	D	213T-365T
248469	M824L Long Motor Mount	C	213T-365T

Motor Mounts that can be used with TXT905, TXT915, and TXT926			
Motor Mount P/N	Description	Gearbox Position that motor will be on top	NEMA Motor Frames
249401	TA9 Standard Motor Mount	B	213T-365T
249399	TA9 Special Motor Mount	B	404T-445T
249404	TAB9 Bottom Motor Mount	D	213T-365T

Available Motor Mounts for TXT/SCXT

Motor Mounts that can be used with TXT1015 and TXT1024			
Motor Mount P/N	Description	Gearbox Position that motor will be on top	NEMA Motor Frames
250401	TA10 Standard Motor Mount	B	254T-365T
250404	TA10 Special Motor Mount	B	404T-445T
250411	TAB10 Bottom Motor Mount	D	254T-365T

Motor Mounts that can be used with TXT1215 and TXT1225			
Motor Mount P/N	Description	Gearbox Position that motor will be on top	NEMA Motor Frames
272310	TA12 Standard Motor Mount	B	286T-445T

Motor Mounts that can be used with TDT1325			
Motor Mount P/N	Description	Gearbox Position that motor will be on top	NEMA Motor Frames
272313	TA13 Standard Motor Mount	B	324T-447T



Motor Mounts that can be used with TDT1425			
Motor Mount P/N	Description	Gearbox Position that motor will be on top	NEMA Motor Frames
272318	TA14 Standard Motor Mount	B	324T-447T

Motor Mounts that can be used with TDT1530			
Motor Mount P/N	Description	Gearbox Position that motor will be on top	NEMA Motor Frames
272392	TA15 Standard Motor Mount	B	405T-449T