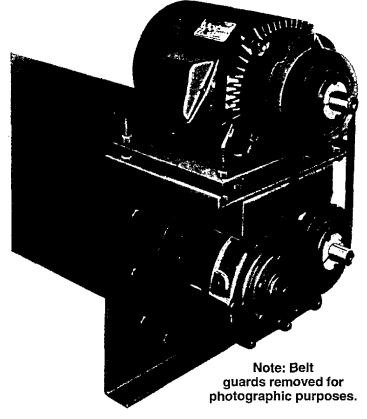
# INSTALLATION MANUAL DODGE® SCD MOTOR MOUNTS

# for Screw Conveyor Drives Sizes 1 Thru 8



The SCD Motor Mount is a rugged all-steel unit requiring no drilling or foundation. It bolts directly to the long side of the DODGE Screw Conveyor Drive. The top plate will accommodate a wide range of popular NEMA frame motors. Belt tension is easily established by the use of four conveniently placed studs.

#### INSTALLATION

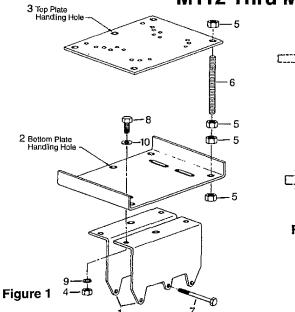
**Note:** Refer to Figure 1 for position of all parts before installation.

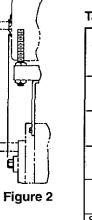
**WARNING:** To ensure that drive is not unexpectedly started, turn off and lock out or tag power source before proceeding. Remove all external loads from drive before removing or servicing drive or accessories. Failure to observe these precautions could result in bodily injury.

- 1. Remove the three bolts required for mounting the SCD Motor Mount from the side of the reducer housing. Install the front and rear supports using the new reducer bolts supplied with the motor mount. Tighten bolts to torque specified in Table 1.
- 2. Mount bottom plate on supports with center handling hole positioned over adapter side of reducer. Insert bolts, washers and nuts through slotted holes and hand tighten.
- 3. Thread two nuts on each threaded rod leaving approximately 1" of rod protruding at one end. Insert threaded rods with 1" of threads through corner holes of bottom plate, thread a hex nut on the rod and tighten securely.
- 4. Slide top plate over the jack screws making sure center handling hole is positioned over adapter side of reducer. Thread a hex nut on the rods and tighten securely.
- 5. Center the motor and bolt snugly to the mounting plate. Align motor with reducer as shown in Figure 2. Loosen the bottom plate bolts and slide the motor and mounting plate until they are in line with the reducer. Tighten all bolts securely.
- 6. Install motor sheave and reducer sheave as close to motor and reducer housings as possible. Accurately align the motor and reducer sheave.
- Install V-belts and tension belts by alternately adjusting the four motor mount jack screws. Make certain that all bolts are securely tightened and that the V-belt drive is properly aligned before operating the Screw Conveyor Drive.

WARNING: Because of the possible danger to persons(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 Baldor Electric nor are the responsibility of Baldor Electric. 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.

## M112 Thru M824 SCD Motor Mounts





#### Table 1-Bolt Tightening Torque Values

|                                    |                             | _                                  | •                           |                                    |                             |
|------------------------------------|-----------------------------|------------------------------------|-----------------------------|------------------------------------|-----------------------------|
| Screw<br>Conveyor<br>Drive<br>Size | Housing<br>Bolts<br>(inlb.) | Screw<br>Conveyor<br>Drive<br>Size | Housing<br>Bolts<br>(inlb.) | Screw<br>Conveyor<br>Drive<br>Size | Housing<br>Bolts<br>(inlb.) |
| SCXT109<br>SCXT115<br>SCXT125      | 360                         | SCXT609<br>SCXT615<br>SCXT625      | 900                         | SCXT305                            | 600                         |
| SCXT209<br>SCXT215<br>SCXT225      | 360                         | SCXT709<br>SCXT715<br>SCXT725      | 1620                        | SCXT405                            | 600                         |
| SCXT309<br>SCXT315<br>SCXT325      | 600                         | SCXT815<br>SCXT825                 | 1620                        | SCXT505                            | 900                         |
| SCXT409<br>SCXT415<br>SCXT425      | 600                         | SCXT105                            | 360                         | SCXT605                            | 900                         |
| SCXT509A<br>SCXT515A<br>SCXT525A   | 900                         | SCXT205                            | 360                         | SCXT705                            | 1620                        |

**SCD Motor Mounts** 

|                       | Used  | Screw E                               | Diameters               | For NEMA             | Part<br>No. |  |
|-----------------------|---|---------------------------------------|-------------------------|----------------------|-------------|--|
| Motor<br>Mount<br>No. | on<br>Drive<br>No.  | Top, Right and<br>Left Side Positions | Bottom<br>Position      | Motor<br>Frames<br>* |             |  |
| M112                  | SCXT109<br>SCXT115<br>SCXT125<br>SCXT105                    | 6, 9, 12"                             | 6, 9"                   | 143 thru 215         | 351069      |  |
| M214                  | SCXT209<br>SCXT215 6, 9, 12, 14"<br>SCXT225<br>SCXT205      |                                       | 6, 9, 12"               | 143 thru 215         | 352069      |  |
| M316                  | SCXT309   |                                       | 6, 9, 12, 14"           | 143 thru 215         | 353069      |  |
| M418                  | SCXT409<br>SCXT415 9, 12, 14, 16, 18"<br>SCXT425<br>SCXT405 |                                       | 9, 12, 14, 16"          | 143 thru 286         | 354069      |  |
| M518                  | SCXT509A<br>SCXT515A<br>SCXT525A<br>SCXT505                 | 9, 12, 14, 16, 18"                    | 9, 12, 14, 16"          | 143 thru 286         | 355169      |  |
| M620                  | SCXT609<br>SCXT615<br>SCXT625<br>SCXT605                    | 12, 14, 16, 18, 20"                   | 12, 14, 16, 18"         | 143 thru 326         | 356069      |  |
| M720                  | SCXT709<br>SCXT715<br>SCXT725<br>SCXT725<br>SCXT705         | 12, 14, 16, 18, 20"                   | 12, 14, 16, 18"         | 143 thru 365         | 356269      |  |
| M824                  | SCXT809<br>SCXT815<br>SCXT825                               | 12, 14, 16, 18, 20, 24"               | 12, 14, 16, 18, 20, 24" | 143 thru 365         | 248469      |  |

Select motor to suit HP requirements.
Note --- Mounts to fit troughs with screws up through 24" diameter are available on special order --- consult factory.

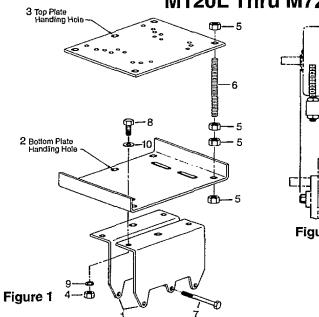
#### **Replacement Parts for SCD Motor Mounts**

| Ref.<br>No. | Name of<br>Part | No.<br>Req'd. | M112<br>Part <u>No.</u> | M214<br>Part No. | M316<br>Part No. | M418<br>Part No. | M518<br>Part No. | M620<br>Part No. | M720<br>Part No. | M824<br>Part No. |
|-------------|-----------------|---------------|-------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| 1           | MM SUPPORT      | 2             | 351170                  | 352170           | 353170           | 354182           | 355170           | 356206           | 356270           | 248479, 248480   |
| 2           | MM BOTTOM PLATE | 1             | 351180                  | 351180           | 351180           | 354183           | 354183           | 356213           | 356267           | 356267           |
| 3           | MM TOP PLATE    | 1             | 351181                  | 351181           | <u>35118</u> 1   | 354184           | 354184           | 356214           | 356268           | 356268           |
| 4           | HEX NUT         | *             | 407282                  | 407282           | 407282           | 407282           | 407282           | 407282           | 407282           | 407282           |
| 5           | HEX NUT         | 16            | 407122                  | 407122           | 407122           | 407279           | 407279           | 407279           | 407281           | 407281           |
| 6           | THREADED STUD   | 4             | 408004                  | 408004           | 408004           | 408003           | 408003           | 408003           | 408591           | 408591           |
| 7           | BOLT            | 3             | 411731                  | 411731           | 411732           | 411733           | 411734           | 411735           | 411736           | 411737           |
| 8           | BOLT            | *             | 411102                  | 411102           | 411102           | 411102           | 411102           | 411102           | 411102           | 411105           |
| 9           | LOCKWASHER      | *             | 419019                  | 419019           | 4 <u>1901</u> 9  | 419019           | 419019           | 419019           | 419019           | 419019           |
| 10          | SAE WASHER      | *             | 419078                  | 419078           | 419078           | 419078           | 419078           | 419078           | 419078           | 419078           |

\* 4 Reg'd. on M112, M214, M316, M418, M518; 6 reg'd on M620, M720.

## M120L Thru M724L SCD Motor Mounts

7



| Screw<br>Conveyor<br>Drive<br>Size | Housing<br>Bolts<br>(inlb.) | Screw<br>Conveyor<br>Drive<br>Size                  | Housing<br>Bolt <del>s</del><br>(inIb.) | Screw<br>Conveyor<br>Drive<br>Size | Housing<br>Bolts<br>(inlb.) |
|------------------------------------|-----------------------------|---|---|------------------------------------|-----------------------------|
| SCXT109<br>SCXT115<br>SCXT125      | 360                         | SCXT609<br>SCXT615<br>SCXT625                       | 900                                     | SCXT405                            | 600                         |
| SCXT209<br>SCXT215<br>SCXT225      | 360                         | SCXT709<br>SCXT715<br>SCXT725<br>SCXT815<br>SCXT825 | 1620                                    | SCXT505                            | 900                         |
| SCXT309<br>SCXT315<br>SCXT325      | 600                         | SCXT105   | 360                                     | SCXT605                            | 900                         |
| SCXT409<br>SCXT415<br>SCXT425      | 600                         | SCXT205   | 360                                     | SCXT705                            | 1620                        |
| SCXT509A<br>SCXT515A<br>SCXT525A   | 900                         | SCXT305   | 600                                     | _                                  | _                           |

#### **SCD Motor Mounts**

| Motor<br>Mount<br>No. | Used  | Screw                                 | Diameters                     | For NEMA          |             |
|-----------------------|---|---------------------------------------|-------------------------------|-------------------|-------------|
|                       | on<br>Drive No.                                     | Top, Right and<br>Left Side Positions | Bottom<br>Position            | Motor<br>Frames * | Part<br>No. |
| M120L                 | SCXT109<br>SCXT115<br>SCXT125<br>SCXT105            | 6, 9, 12, 16, 18, 20*                 | 6, 9, 12, 16, 18 <sup>*</sup> | 143 thru 215      | 272625      |
| M220L                 | SCXT209<br>SCXT215<br>SCXT225<br>SCXT205            | 6, 9, 12, 14, 16, 18, 20"             | 6, 9, 12, 16, 18, 20"         | 143 thru 215      | 272626      |
| M320L                 | SCXT309<br>SCXT315<br>SCXT325<br>SCXT305            | 6, 9, 12, 14, 16, 18, 20"             | 6, 9, 12, 14, 16, 18, 20"     | 143 thru 215      | 272627      |
| M424L                 | SCXT409<br>SCXT415<br>SCXT425<br>SCXT425<br>SCXT405 | 9, 12, 14, 16, 18, 20, 24*            | 9, 12, 14, 16, 18, 20, 24"    | 143 thru 286      | 272628      |
| M524L                 | SCXT509A<br>SCXT515A<br>SCXT525A<br>SCXT505         | 9, 12, 14, 16, 18, 20, 24"            | 9, 12, 14, 16, 18, 20, 24"    | 143 thru 286      | 272629      |
| M624L                 | SCXT609<br>SCXT615<br>SCXT625<br>SCXT605            | 12, 14, 16, 18, 20, 24"               | 12, 14, 16, 18, 20, 24"       | 143 thru 326      | 272630      |
| M724L                 | SCXT709<br>SCXT715<br>SCXT725<br>SCXT705            | 12, 14, 16, 18, 20, 24"               | 12, 14, 16, 18, 20, 24"       | 143 thru 326      | 272631      |
| M824L                 | SCXT815<br>SCXT825                                  | 12, 14, 16, 18, 20, 24"               | 12, 14, 16, 18, 20, 24"       | 143 thru 365      | 248469      |

\* Select motor to suit HP requirements.
Note — Mounts to fit troughs with screws up through 24" diameter are available on special order — consult factory.

#### **Replacement Parts for SCD Long Motor Mounts**

| Ref. | Name of         | No.    | M120L    | M220L    | M3201.         | M424L    | M524L    | M624L    | M724L    |
|------|-----------------|--------|----------|----------|----------------|----------|----------|----------|----------|
| No.  | Part_           | Req'd. | Part No. | Part No. | Part No.       | Part No. | Part No. | Part No. | Part No. |
| 1    | MM SUPPORT      | 2      | 272635   | 272636   | 272637         | 272638   | 272639   | 272640   | 272641   |
| _ 2  | MM BOTTOM PLATE | 1      | 351180   | 351180   | 351180         | 354183   | 354183   | 356213   | 356213   |
| 3    | MM TOP PLATE    | 1      | 351181   | 351181   | 351181         | 354184   | _354184  | 356214   | 356214   |
| 4    | HEX NUT         | *      | 407282   | 407282   | 407282         | 407282   | 407282   | 407282   | 407282   |
| 5    | HEX NUT         | 16     | 407122   | 407122   | 407122         | 407279   | 407279   | 407279   | 407281   |
| 6    | THREADED STUD   | 4      | 408004   | 408004   | 408004         | 408003   | 408003   | 408003   | 408591   |
| 7    | BOLT            | 3      | 411731   | 411731   | 411732         | 411733   | 411734   | 411735   | 411736   |
| 8    | BOLT            | *      | 411102   | 411102   | 411102         | 411102   | 411102   | 411102   | 411102   |
| 9    | LOCKWASHER      | *      | 419019   | 419019   | <u>419</u> 019 | 419019   | 419019   | 419019   | 419019   |
| 10   | SAE WASHER      | *      | 419078   | 419078   | 419078         | 419078   | 419078   | 419078   | 419078   |

\* 4 Req'd. on M120L, M220L, M320L, M424L, M524L; 6 req'd on M624L, M724L.



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