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# Instructions Pre-Design III Stir-Ator - Gooseneck and Swivel Replacement Kit Installation

## Gooseneck and Swivel Replacement 1965 to Present

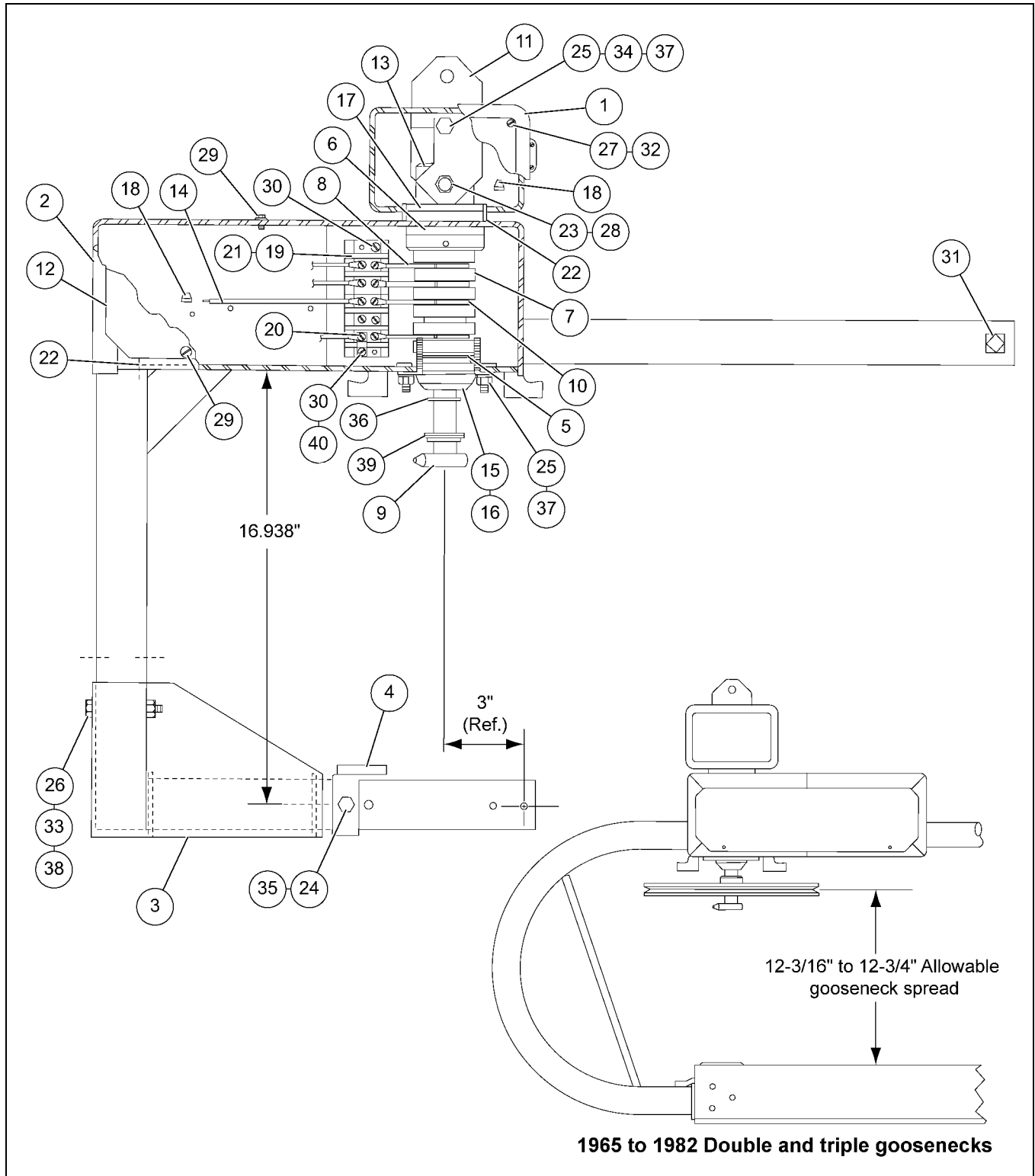


Figure 1

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## Pre-Design III Stir-Ator - Gooseneck and Swivel Replacement Kit Installation

| Ref # | Part #   | Description                                                 | Qty |
|-------|----------|-------------------------------------------------------------|-----|
| 1     | 103A0003 | Junction Box Cover                                          | 2   |
| 2     | 103A0127 | Gooseneck and Swivel Convection                             | 1   |
| 3     | 103A0128 | Gooseneck - Pivot Tube                                      | 1   |
| 4     | 103A0129 | Gooseneck - Pivot Stop                                      | 1   |
| 5     | 103E0012 | Washer - Insulating, 2" O.D.                                | 2   |
| 6     | 104A0015 | Bearing, Thrust, Swivel                                     | 1   |
| 7     | 104E2005 | Swivel - Electric, 3 PH                                     | 1   |
| 8     | 104E0020 | Strap - Swivel, 9.35" OAL                                   | 4   |
| 9     | 105A0030 | Center Drive Arm and Shaft                                  | 1   |
| 10    | 105A0097 | Swivel Spring Clip                                          | 4   |
| 11    | 105A0099 | Junction Box Assembly                                       | 1   |
| 12    | 106A052  | Cover - Swivel Box                                          | 2   |
| 13    | 106A055  | Bushing - Flanged, Swivel                                   | 1   |
| 14    | 106A032  | Tube - Extension                                            | 4   |
| 15    | PT0235   | Ball, Bearing Bronze 7/8" I.D. x 2" O.D.                    | 1   |
| 16    | PT0421   | Flange, Three Hole Plated 3-3/4" O.D.                       | 2   |
| 17    | PT0808   | Seal, for 2-1/4" Shaft                                      | 1   |
| 18    | 1EL0557  | Connector, 3M Scotchlok B/G+                                | 8   |
| 19    | 1EL0885  | Connector, Terminal Block 5P 55A 600V                       | 1   |
| 20    | 1EL0895  | Connector, Terminal Block- Jumper                           | 1   |
| 21    | 1EL0897  | Terminal Block Insulating Strip                             | 1   |
| 22    | MS0372   | Silicone Rubber Sealent (RTV 108) (Caulk between welds)     | A/R |
| 23    | 1FH0728  | Nylock Nut 1/2"-20 Plated Grade 2                           | 2   |
| 24    | 1FH0735  | Hex Lock Nut 5/16"                                          | 1   |
| 25    | 1FH0764  | Hex Nut 5/16"                                               | 4   |
| 26    | 1FH0765  | Hex Nut 3/8"                                                | 2   |
| 27    | 1FH0783  | Hex Machine Screw Nut 10-24                                 | 4   |
| 28    | 2FH0435  | Bolt, Stud Clinch 1/2"-20 x 1-1/2" ZN Grade 8               | 2   |
| 29    | 2FH0475  | Slotted Hex Washer Head Self-Tapping Screw 10 x 1/2" Type F | 6   |
| 30    | 2FH0478  | Slotted Hex Washer Head Self-Tapping Screw 10 x 1" Type F   | 2   |
| 31    | 2FH0617  | Screw, Set 3/8"-16 x 3/4" SKT HD ZN Cup Point               | 1   |
| 32    | 2FH0740  | Screw, MS #10-24 x 5" RHS ZN                                | 4   |
| 33    | 2FH0863  | Hex Bolt 3/8" x 3"                                          | 2   |
| 34    | 2FH1083  | Hex Bolt 5/16" x 1-3/4" Grade 5                             | 1   |
| 35    | 2FH1087  | Hex Bolt 5/16" x 2-3/4" Grade 5                             | 1   |
| 36    | 3FH0568  | Retaining Ring, 7/8" External E-Type Black                  | 2   |
| 37    | 3FH0790  | Lock Washer 5/16"                                           | 4   |
| 38    | 3FH0791  | Lock Washer 3/8"                                            | 2   |
| 39    | 3FH0829  | Bushing, Machinery Bushing 1-3/8" x 7/8" x 14 Gauge         | 2   |
| 40*   | 3FH0962  | Rivet Washer 3/16"                                          | 1   |

\* **NOTE:** Put between 1EL0896 and 1EL0885.

### Gooseneck and Swivel Replacement Kit Installation Instructions (103A0126)

This conversion will now cover either a conversion of the swivel on the 1965-1967 Stir-Ators or a replacement of damaged goosenecks on 1968-1982 Stir-Ators which were not compatible to the Stir-Guard before. (See your dealer for Stir-Guard information.)

1. **Conversion Assembly:** Be sure the correct size pulley was ordered. To install it, remove the junction box covers and remove the 5/16" bolt. Slide the center drive arm out of the swivel and remove the upper snap ring and one washer. Slide the pulley onto the shaft with the hub up, then replace the washer and snap ring. (See Chart on Page 4.) Carefully slide the shaft up through the swivel so the wires are not pinched or nicked inside the swivel. Secure with the 5/16" hardware. Check the distance between the pivot tube and center of the drive pulley. Adjust it if needed by removing the two bolts in the rectangular tube. (See Chart on Page 4 and See Figure 2 to determine narrow or wide spacing.) Measure the inboard frame pivot, if it is 6" long, bolt the pivot stop in the back hole. If it is 4" long, bolt the pivot stop in the front hole, and cut off 1-1/4" of the pivot tube, leaving about 3/8" past the inside small hole for the cotter pin. (See Figure 3.)

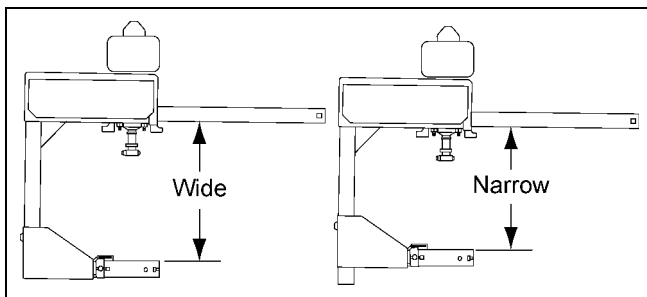


Figure 2

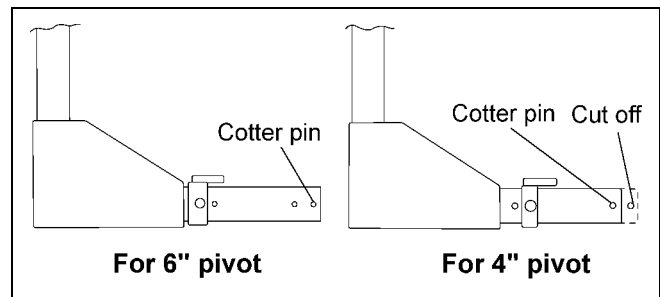
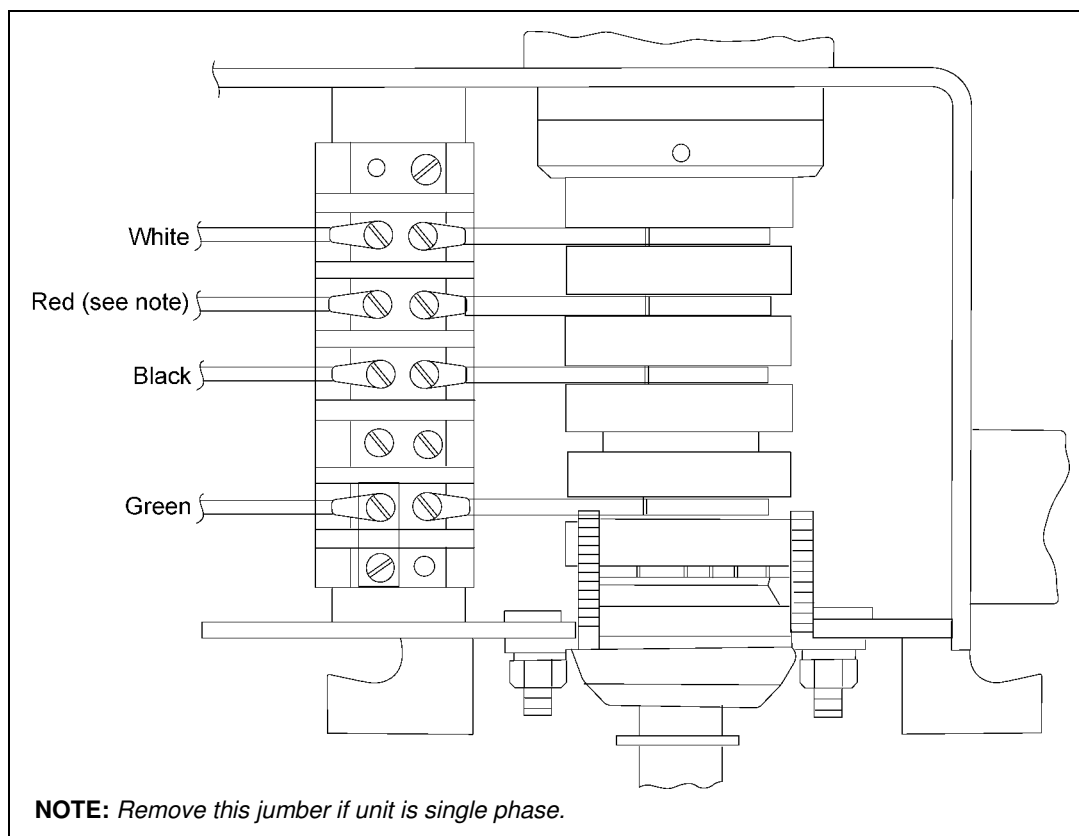


Figure 3

2. **Assembly of Conversion to Unit:** Disconnect power to the Stir-Ator and be sure it cannot be accidentally turned ON while work is being performed.
3. Support the bridge frame with blocking or other safe support means. This is best done in a full grain bin, otherwise the Stir-Ator may have to be lowered to the bin floor and worked on sitting on sawhorses.
4. Disconnect all wires from the old gooseneck and center pivot junction box.
5. Remove the cable from the center drive pulley.
6. Cut the extension pipe off 14" from the center of the swivel being sure NOT to nick or cut the yoke wire running inside the tube.
7. Remove the main suspension clevis bolt.
8. Remove the old gooseneck by removing the cotter pin at the inboard frame pivot.
9. Slide the new swivel into the inboard frame pivot. Re-install the cotter pin and ring (if necessary) at the inboard frame pivot.
10. Insert the yoke wires and extension pipe into the stub pipe of the swivel (on single auger Stir-Ators, the kick-in stop will have to be modified to fit over the stub pipe).
11. Re-install the main suspension clevis bolt.
12. Adjust the length of the extension in the stub pipe to make the cable idler pulleys level, then tighten the set screw in the stub pipe.

## Pre-Design III Stir-Ator - Gooseneck and Swivel Replacement Kit Installation

13. Re-wire the yoke leads to the swivel extension wires and fasten with wire nuts. *(See Figure 4.)*  
Rewire the junction box connections following the color coded wires. If you have a single phase unit cap off the red swivel wire.



**Figure 4**

14. Put the cable back on and tighten to proper tension.
15. Remove the blocking and re-adjust the suspension chains so the bridge frame is 1" to 2" higher at the center of the bin than at the bin wall. Run the trolley in and out a complete cycle to be sure it clears everything. Check the adjustment of the tilt-in and tilt-out stops at this time also.

### Drive Pulley Selection Chart

| Production Year | # of Augers | Drive Pulley | Part #   | Pulley to Frame space | Pivot Tube Length |
|-----------------|-------------|--------------|----------|-----------------------|-------------------|
| 1965-1969       | 1           | 10"          | 103A0048 | Narrow                | 6"                |
| 1970-1982       | 1           | 10"          | 103A0048 | Narrow                | 4"                |
| 1965-1966       | 2           | 12"          | 103A0049 | Narrow                | 6"                |
| 1966-1969       | 2           | 14"          | 105A0101 | Wide                  | 6"                |
| 1970-1982       | 2           | 12"          | 103A0049 | Wide                  | 4"                |
| 1970-1982       | 3           | 14"          | 105A0101 | Wide                  | 4"                |