Truck-mounted Supplement to MF8000 Series Mixer Feeder Operator's Manual

GENERAL INFORMATION

NOTE: *"Right" and "left" are determined from a position standing behind the Mixer Feeder and facing the direction of forward travel. From this position, the Discharge Conveyor is on the left side. "Front" would be the truck cab end of the Mixer Feeder.*

This Supplement provides illustrated details for installation and operation of a Truck-mounted MF8000 Series Mixer Feeder. This Supplement is to be used in conjunction with the Operator's Manual titled "8000 Series Mixer Feeders". Refer to the Table provided for sizing and truck selection information.

CAUTION

BEFORE proceeding to perform any installation, modification or adjustments on this unit, exercise the MANDATORY SAFETY SHUTDOWN PROCEDURE as described in the Mixer Feeder Operator's Manual.

NOTE: *Mixer Feeders are designed for mounting on trucks having single rear axles and support beams which are a standard 34″ (863.5 mm) apart. Many truck makes and models can be used, but the following minimum requirements on "Potential Weight" and "Cab to Axle" Dimensions MUST be met. Avoid mounting a Mixer Feeder on a truck equipped with a tandem rear axle because interference problems may develop when attempting to connect the Drive Line.*

Selecting a Mixer Feeder (Fig. 1)

Refer to the MF8000 Series Mixer Feeder Operator's Manual and select the appropriate Mixer Feeder (MF8435 or MF8500) on the basis of your own particular mixing and feeding requirements.

Hydraulic and electric power, to run the Mixer Feeder and Discharge Conveyor, is derived from the truck engine, electrical system and Drive Line-powered hydraulic system.

Selecting a Truck

Select a single rear axle truck with a weight carrying capacity at least equal to the respective value listed in Table 1 and Cab to Axle Dimension listed in Table 2. In addition, the truck should be equipped with a hand throttle and a tachometer.

Using the following "Power Take Off" and "Engine Horsepower Requirements", select the proper truck PTO and truck engine size.

Power Take Off Requirements

The truck PTO assembly should be:

1. Capable of transmitting a minimum of 200 ft-lb (271 N-m) torque.
2. Rotation opposite that of truck engine crankshaft so that the PTO Drive Shaft rotates clockwise as viewed from the back of the Mixer Feeder/truck.

Table 1: Mixer Feeder Potential Weights

Mixer Feeder Model	8435	8500
Empty Mixer Feeder Weight - lb (kg)	9,565 (4,339)	10,288(4,676)
Potential Feed Weight at 30 lb/ft^3 (480 kg/m^3) - lb (kg)	10,740 (4,882)	12,300 (5,591)
Potential Loaded Mixer Feeder Weight lb (kg)	20,305 (9,230)	22,588 (10,267)

Table 2: Truck Minimum Cab to Axle Dimensions in Inches (mm)

Mixer Feeder Model	8435	8500
Cab to Axle Dimension	126 (3,200)	138 (3,505)

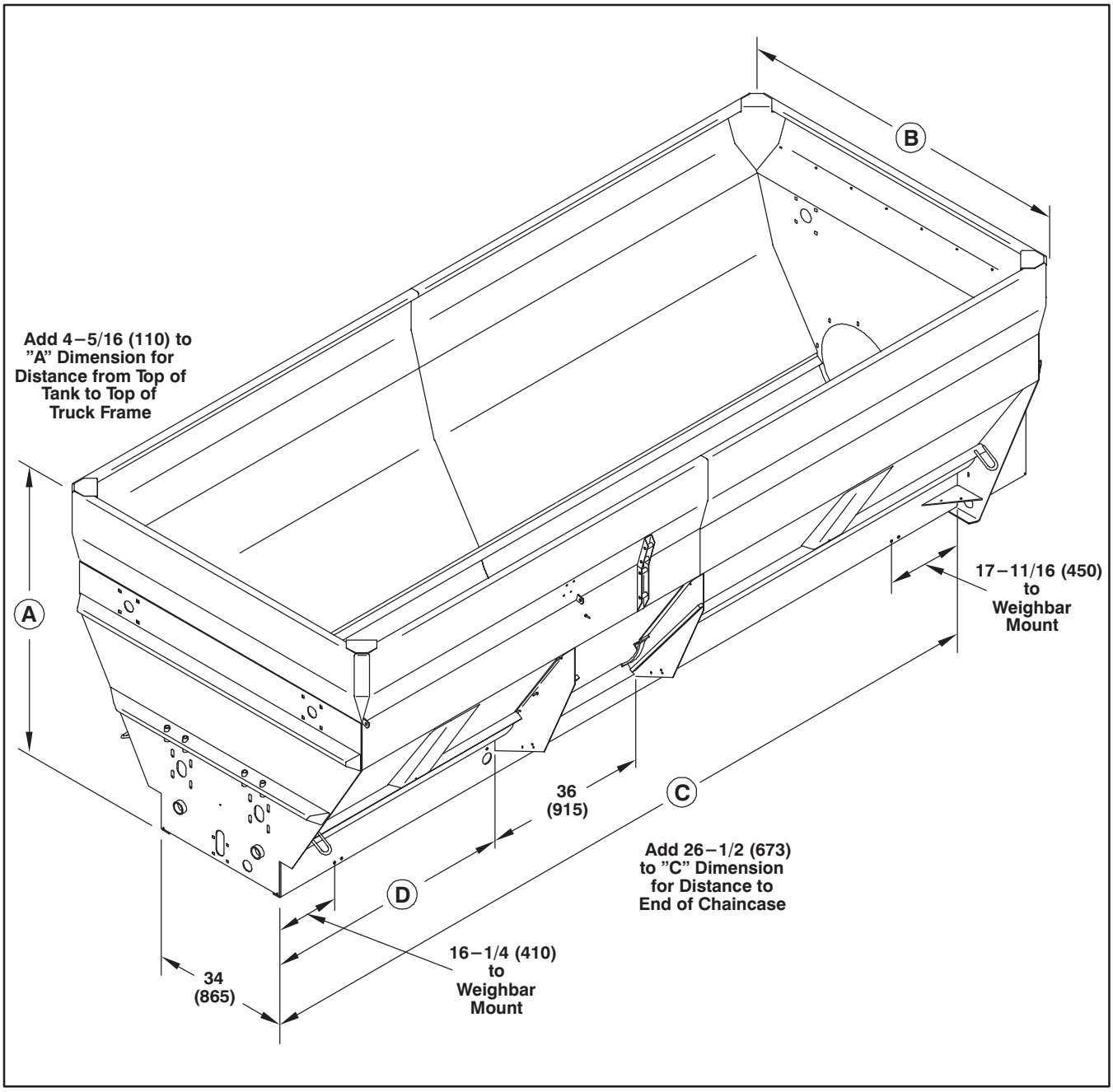


Fig. 1: Unit Dimensions & Mounting Locations in Inches (Millimeters)

Model	8435	8500
"A" Overall Height	73 (1,854)	
"B" Overall Width	84 (2,134)	
"C" Box Length	168 (4,265)	192 (4,875)
"D" Door Distance from Front	49 (1,245)	61 (1,550)

3. Approximate 50 to 60% reduction from the engine speed, so that at 2000 engine RPM, the Mixer Feeder Lower Augers rotate at 25 to 30 RPM. The standard Mixer Feeder reduction will rotate the lower Augers at 30 RPM with 1000 RPM on the truck PTO output shaft. If a PTO can NOT be selected to operate within this range, contact your dealer.

The following information is required for ordering the proper truck PTO:

4. Truck make (manufacturer).
5. Truck model (manufacturer's description).
6. Truck year.
7. Engine size.
8. Transmission model number.
9. Transmission make.
10. Number of speeds.
11. PTO opening locations.

Table 3: Mixer Feeder Minimum Horsepower Requirements

Mixer Feeder Model	Mixing Horsepower in hp (kw)
8435	48 (36)
8500	55 (41)

Truck Engine Horsepower Requirements

The minimum horsepower required to operate the appropriate model Mixer Feeder is listed in Table 3.

Then, calculate the truck horsepower requirement (truck horsepower minimum at 2,000 RPM) with 5 hp per 1000 lb (3.7 kw per 453 kg) of net load (total combined weight of feed and Mixer Feeder). Examples are provided for each respective model Mixer Feeder in Tables 4a and 4b.

NOTE: *The total horsepower required can vary greatly depending on the type (and resultant weight) of feed being mixed. If baled hay or other long stemmed materials will be mixed, more horsepower will be necessary.*

Minimum Truck Horsepower Calculation Examples:

Table 4a: Truck-mounted MF8435 Mixer Feeder

Box Weight = 9,565 lb (4,339 kg)

Feed Weight = 10,740 lb (4,882 kg)

Total Weight = 20,305 (9,230 kg)

20,305 x 5 hp / 1000 lb = 102 hp

{9,230 x (3.7 kw / 454 kg)} = 75 kw

Total hp (kw) = Truck hp (kw) + MF hp (kw)

= 102 hp (75 kw) + 48 hp (36 kw)

= 150 hp (111 kw)

Table 4a: Truck-mounted MF8500 Mixer Feeder

Box Weight = 10,288 lb (4,676 kg)

Feed Weight = 12,300 lb (5,591 kg)

Total Weight = 22,588 (10,267 kg)

22,588 x 5 hp / 1000 lb = 113 hp

{10,267 x (3.7 kw / 454 kg)} = 84 kw

Total hp (kw) = Truck hp (kw) + MF hp (kw)

= 113 hp (84 kw) + 55 hp (41 kw)

= 168 hp (125 kw)

SET-UP & ASSEMBLY

CAUTION

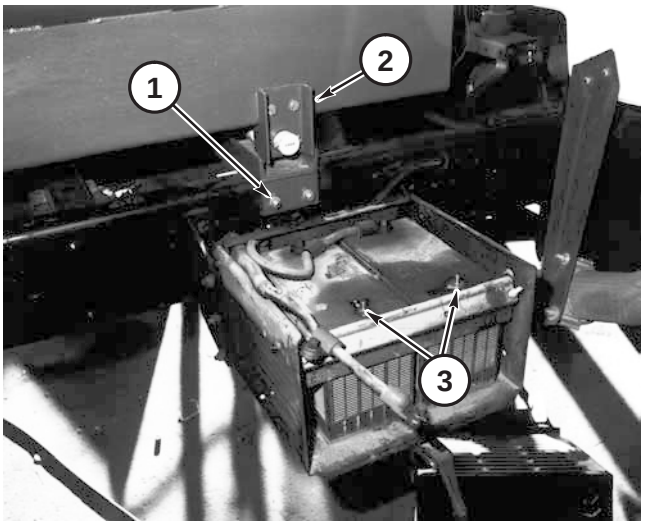
A Mixer Feeder is extremely heavy and awkward. Moving and raising the unit, for set-up & assembly should be done from beneath using an adequately-sized forklift. Refer to weights listed in the Horsepower Calculation information under the "Truck Engine Horsepower Requirements" topic. In addition, before welding on the Mixer Feeder Frame, BE SURE to have the truck battery positive (+) cable connection removed as well as the Power Cord and Load Cell Cord connections removed from the Scale Indicator to prevent damaging delicate truck or Scale electrical components. BE SURE to locate the welding ground connection close to the weld area.

This Set-up & Assembly information is divided into two sections; Standard Components and Accessory Components. The Standard Components section is divided into six subtopics: Mixer Attachment to Truck Frame, Truck Drive Line Mounting, Discharge Conveyor Mounting, Scale System Mounting & Wiring, Directional Control Valve & Switches Wiring and, Fenders & Ladder Mounting. It should be understood that two people can and will be able to accomplish these procedures more quickly, safely and efficiently.

Standard Components

Mixer Attachment to Truck Frame (Figs. 2, 3 & 4)

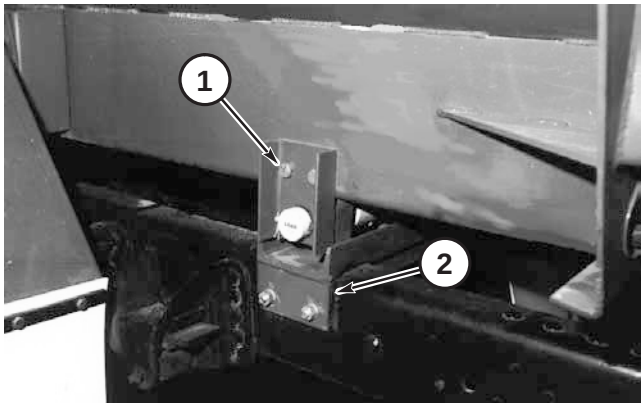
1. Properly orient and position the two Weighbar Mounts onto the truck frame; one near the truck cab and the other near the back end.
2. Properly orient (with Arrow pointing DOWN) and pre-install each of the four Weighbars into the front and back Weighbar Mount with (1 each) 3/8 x 2-3/4 Clevis Pin.
3. Properly orient and install each of the four Weighbar Brackets over the ends of the Weighbars. Install a 3/8 x 2-1/4 Clevis Pin through hole in the Weighbar to retain the Weighbar Bracket.



1 – Weighbar Mount
2 – Weighbar Bracket Secured in Pre-drilled Holes
3 – Truck Battery Positive(+) Cable Connection Removed for Welding

Fig. 2: Front Weighbar Mount

4. Using a forklift, carefully place the Mixer Feeder into proper position over the truck frame and Weighbar Mounts and Brackets. The proper position is that location which will allow about two-thirds of the Mixer Feeder Box to be in front of the rear axle while still maintaining a minimum distance of 6", between the front of the Mixer Feeder and the back of the truck cab, for service and adjustment access. Then, slide the front and back Weighbar Mounts ahead or back to line-up the holes in the Weighbar Brackets with the pre-drilled holes in the Mixer Feeder Frame. If possible, use pre-drilled holes in the Mixer Feeder Frame for locating the Weighbar Brackets.



1 – Weighbar Bracket Secured in Pre-drilled Holes
2 – Weighbar Mount and Shim (If Required)

Fig. 3: Rear Weighbar Mount

NOTE: *Pre-drilled holes provide the best weight distribution. However, if interference is encountered, because of existing components attached to the truck frame, new 17/32" diameter holes will have to be drilled (using the Weighbar Brackets as a template) in the Mixer Feeder Frame for attaching the Weighbar Brackets. BE SURE to locate the new holes as close as possible to (but NO farther than 12" from) the pre-drilled holes.*

CAUTION

A Mixer Feeder is extremely heavy and awkward. Lower the Mixer Feeder Box just enough to line-up, drill and attach the Weighbar Mounts and Brackets. Support the Box with the forklift until it is secured.

5. Tightly secure the Weighbar Brackets to the Mixer Feeder Frame using (2 each) 1/2 x 1-3/4 Cap Screws, Flat Washers, Lock Washers & Nuts.
6. Drill the 17/32" diameter holes in the truck frame for attaching the Weighbar Mounts. Then, tightly secure the Weighbar Mounts and Shims to the truck frame with (4 each) 1/2 x 1-3/4 Cap Screws, Lock Washers & Nuts. After the Box is secured, the forklift can be removed.

NOTE: *BE SURE to use the correct number and size Shims, to obtain a tight fit between the*

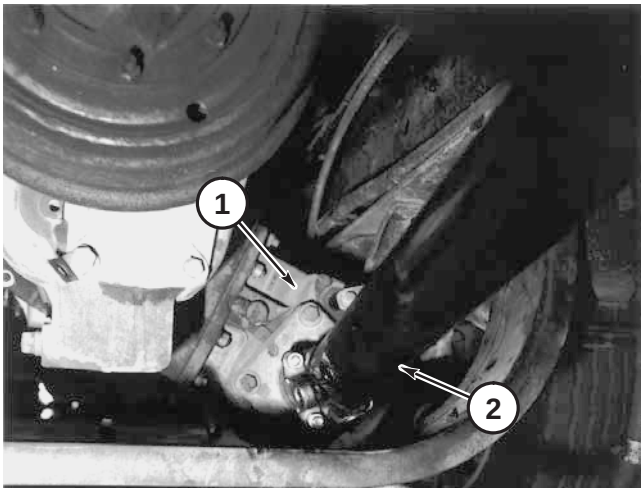
Weighbar Mounts and the truck frame. In addition, Shims can be drilled or notched, as required, to provide clearance for protruding hardware.

Truck Drive Line Mounting (Figs. 4, 5, 6, 7, 8, 9, 10, 11 & 3)

Based on the truck and Mixer Feeder being used, the Drive Line components may have to be shortened. Proceed as follows:

7. Connect the 1-1/4″ Yoke end of the Drive Line Tube assembly to the truck PTO shaft using the 5/16 x 1-1/4 Key (supplied) and the two Set Screws on the Yoke.

8. Position 1 (of the 2) Mount Bracket on the truck frame in alignment with the Center Bearing assembly at the end of the Drive Line Tube. Then, properly orient and loosely attach the Bearing onto the Bearing Mount with (2 each) 1/2 x 1-1/4″ Cap Screws, Flat Washers, Lock Washers and Nuts.

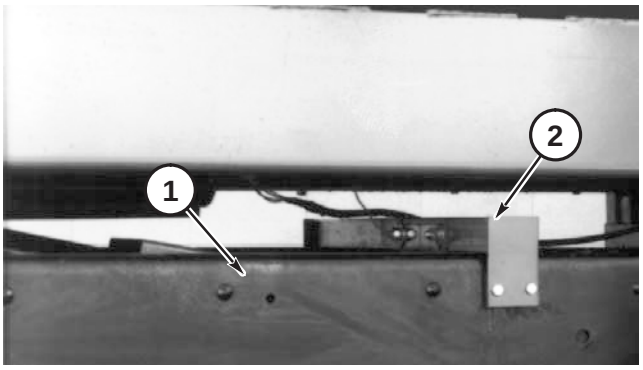


1 – Truck PTO Gearbox
2 – Drive Line Tube

Fig. 4

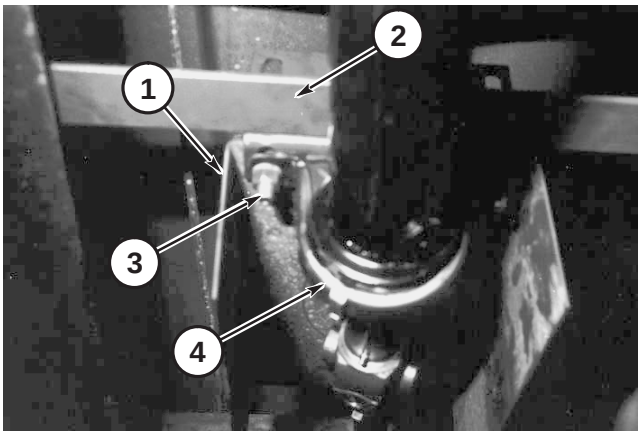
9. Temporarily rest the other Mount Bracket on the truck frame in the area over the rear axle.

10. At the back end of the Mixer Feeder, temporarily Key the Universal Joint to one (of the 2) 1-1/2″ Drive Shafts. Apply an anti–seize lubricant to the Chaincase Shaft splines. Then, slide the U–Joint end of the Shaft assembly onto the Mixer Feeder Chaincase splined Shaft.



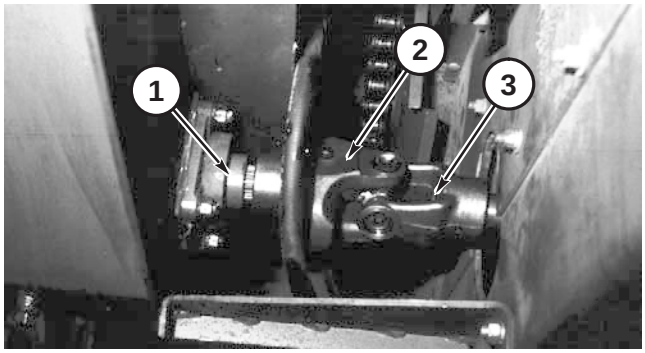
1 – Truck Frame
2 – Mount Bracket (1 of 2) & Shim (If Required)

Fig. 5



1 – Bearing Mount
2 – Mount Bracket (Front)
3 – 1/2 x 1-1/4″ Cap Screw, Flat Washer, Lock Washer & Nut (1 each of 2)
4 – Center Bearing of Drive Line Tube

Fig. 6

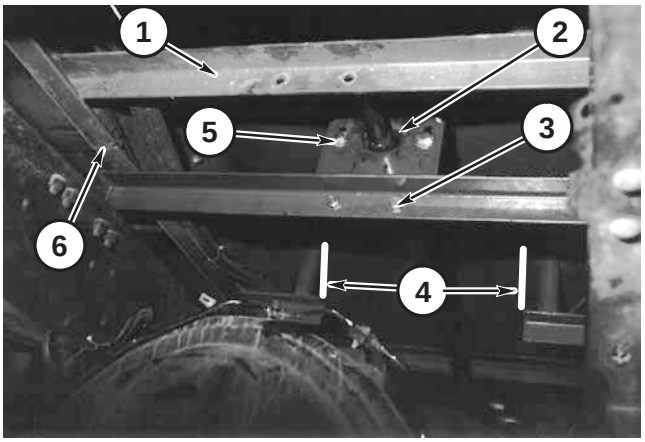


1 – Chaincase Splined Shaft (1/2” of Exposed Shaft)
2 – Universal Joint Assembly
3 – (1 of 2)1-1/2” Diameter Drive Shaft (Keyway End)

Fig. 7

NOTE: *A piece of rope or chalkline can be conveniently used to check the planned Drive Line path for obstructions. It may also be desirable to*

make a cutaway in (or otherwise completely cut through) one of the existing Mixer Feeder Crossbrace Supports to achieve the most direct Drive Line path. If this is done, BE SURE to weld a new field-fabricated crossbrace (to replace the side to side reinforcement) as close as possible to the modification.



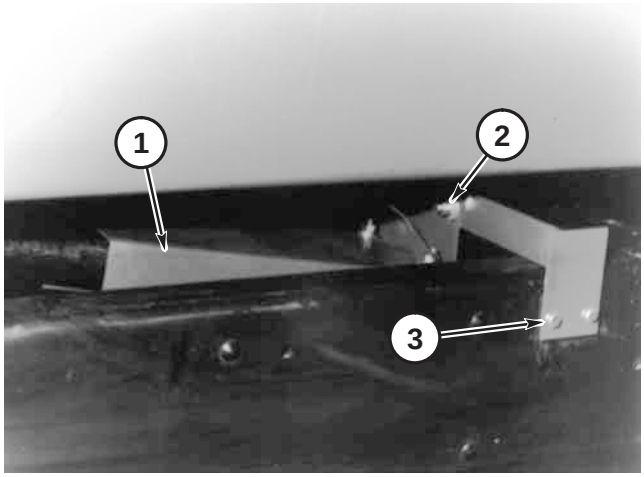
1 – Field-fabricated Crossbrace Support
2 – Tackwelded Sleeve
3 – 1/2 x 1-1/2 Cap Screw, Flat Washer, Lock Washer and Nut (1 each of 2) Securing Hanger Bearing Plate to Mount Bracket
4 – Portion of Original Crossbrace Support Cut Away
5 – 1/2 x 1-1/4 Cap Screw, Flat Washer, Lock Washer and Nut (1 each of 2) Securing Bearing to Hanger Bearing Plate
6 – Back Mount Bracket Secured to Right Side of Mixer Feeder Frame with (2 each) 3/8 x 1-3/4 Cap Screw, Lock Washer and Nut.

Fig. 8

11. Temporarily Key the Center U-Joint to the other 1-1/2″ Drive Shaft. Then, working from both ends, align and position both 1-1/2″ Drive Shaft assemblies and the Drive Line Tube, to determine the most direct unobstructed Drive Line connection between truck PTO and Mixer Feeder Chaincase Shaft. Based on obstructions encountered, either or both 1-1/2″ Drive Shafts may have to be shortened. Where possible, try to shorten both 1-1/2″ Drive Shaft assemblies equally.

NOTE: *The maximum angle of any U-Joint MUST NOT exceed 13°.*

12. With the required position established, clamp the Bearing Mount to the Mount Bracket (temporarily positioned in step 8.). Locate and drill the two 17/32" diameter mounting holes in the Mount Bracket. Then, tightly secure the Bearing Mount to the Mount Bracket with (2 each) 1/2 x 1-1/2 Cap Screws, Flat Washers, Lock Washers and Nuts. BE SURE to keep the Bearing slid all the way onto the Splined Shaft and against the Drive Line Tube. Next, locate and drill the four 13/32" diameter Mount Bracket attachment holes in the truck frame. Then, secure the Mount Bracket {and Spacer Plate(s), if required} to the truck frame with (2 each side) 3/8 x 1-3/4 Cap Screws, Lock Washers & Nuts.



1 – PTO Shield Secured with Same Hardware Used to Attach Bearing to Bearing Mount
2 – Bearing Mount Secured to Front Mount Bracket with (2 each) 1/2 x 1-1/2 Cap Screws, Flat Washers, Lock Washers & Nuts
3 – Front Mount Bracket Secured to Truck Frame with (2 each) 3/8 x 1-3/4 Cap Screws, Lock Washers & Nuts

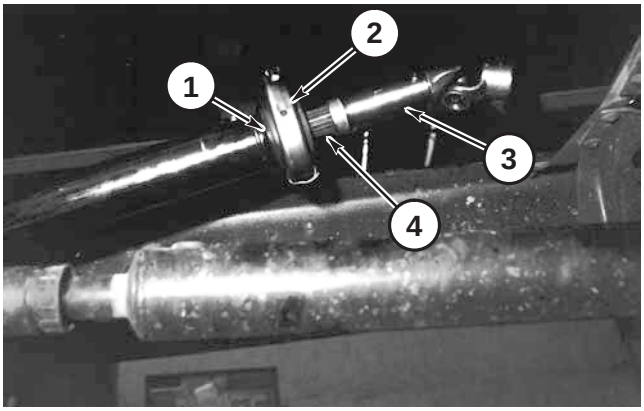
Fig. 9

13. With the desired Drive Line routing established, determine where to cut the "NON-KEYED END" of the 1-1/2″ Drive Shaft(s). Make sure each Shaft is at least flush or protruding NO more than 1/4" beyond its respective Yoke.

NOTE: *BE SURE to allow from 1 to 1-1/2″ of Splined Shaft between the end of the Slip Yoke and the face of the Center Bearing. In addition, allow 1/2″ of Splined Shaft between the face of the Universal Joint and face of the Lock Collar on the Chaincase Bearing.*

14. Cut Shaft(s), as required. Recheck the routing and Shaft-Yoke relationships and shorten, if necessary.

15. Slide the Sleeve over the cutoff end of the rear 1-1/2″ Drive Shaft. Next, slide the Hanger Bearing Plate, the 1-3/4″ Bearing and the Lock Collar over the Sleeve and Shaft. Then, loosely attach the Bearing to the Hanger Bearing Plate with (2 each) 1/2 x 1-1/4 Cap Screws, Flat Washers, Lock Washers and Nuts.



1 – Center Bearing Slid All the Way onto Splined Shaft Against Drive Tube
2 – Center Bearing
3 – Slip Yoke
4 – 1 to 1-1/2" of Exposed Splined Shaft

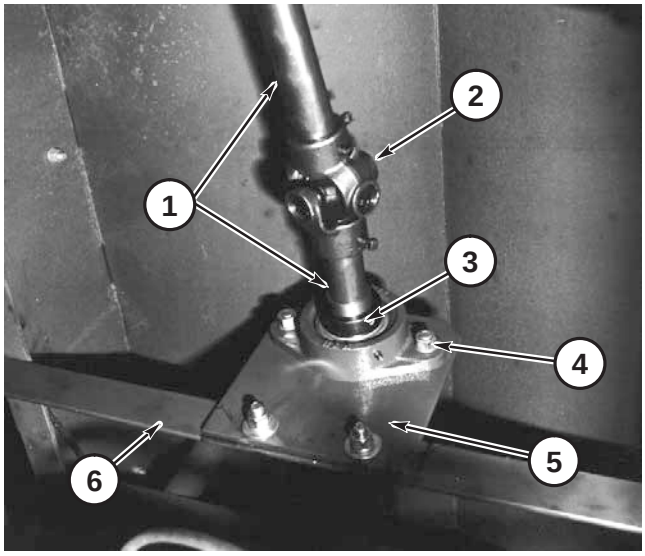
Fig. 10

16. Loosely assemble all of the Drive Line components and position them between the Drive Line Tube and Chaincase Shaft. Then, properly orient and position the back Mount Bracket in alignment with the Hanger Bearing Plate at a position so that it will be within 1 to 2″ from the end of the Yoke after it has been attached to the rear 1-1/2″ Drive Shaft. Next, drill two 17/32″ diameter holes in the Mount Bracket. Then, tightly secure the Hanger Bearing Plate to the Mount Bracket using (2 each) 1/2 x 1-1/2 Cap Screws, Flat Washers, Lock Washers and Nuts. Next, locate and drill the four 13/32″ diameter Mount Bracket attachment holes in the Mixer Feeder Frame. Then, secure the Mount Bracket and Spacer Plates to the Frame with (2 each side) 3/8 x 1-3/4 Cap Screws, Lock Washers & Nuts.

17. Position the Sleeve so that it is centered in the Bearing and tackweld the Sleeve to the Drive Shaft.

NOTE: *Where facilities allow, the cutoff ends of the two 1-1/2" Drive Shafts may be keyed (instead of welded), if desired. In addition, BE SURE to correctly time all four Drive Line U-Joints, before welding or keying the Shafts. (Refer to the "Timing Detail" provided in Fig. 3).*

18. With all of the procedures through step 17. completed, the two 1-1/2″ Drive Shafts can be keyed or welded (using a 1/4″ weld bead completely around the Shafts) to their respective Yokes .



1 – 1-1/2" Drive Shafts (2)
2 – Center U-Joint
3 – Lock Collar Over Tackwelded Sleeve
4 – Bearing Secured to Hanger Bearing Plate with (2 each) 1/2 x 1-1/4 Cap Screws, Flat Washers, Lock Washers & Nuts
5 – Hanger Bearing Plate Secured to Rear Mount Bracket with (2 each) 1/2 x 1-1/2 Cap Screws, Flat Washers, Lock Washers & Nuts
6 – Rear Mount Bracket (Secured to Mixer Feeder Frame)

Fig. 11

19. Properly orient and attach the PTO Shield over the Bearing Mount using the hardware securing the Bearing to the Bearing Mount. Then, tightly secure all previous loosely attached hardware.

Discharge Conveyor Mounting (See Fig 14)

NOTE: *Procedures for installing the Discharge Conveyor are the same as for a trailer-mounted Mixer Feeder and covered in the Mixer Feeder Operator's Manual. All of the Hydraulic Hoses are already connected at the factory with the exception of the Discharge Conveyor Hoses. Refer to Fig. 14 and proceed as follows:*

20. Connect the Hydraulic Hoses between the Hydraulic Motor and the Elbows in the Ports of the Directional Control Valve. BE SURE to route the Hoses through the Access Hole provided in the Mixer Feeder Frame.

Scale System Mounting & Wiring

The Scale Indicator components are shipped separately. Components MUST be unpackaged and attached to the Mixer Feeder and mounted inside the truck cab. Proceed as follows:

NOTE: *The Junction Box will be located and attached in pre-drilled mounting holes on the front right side of the Mixer Feeder Frame. To facilitate installation, pre-wire the four Weighbar Cords before attaching the Box to the Mixer Feeder Frame. All of the Weighbar Cords MUST remain at their original factory-provided lengths and NOT be shortened; loop and anchor any excess Cord on one of the Cord Holders. BE SURE that the Cords, coming from the Weighbars, are routed and anchored away from any moving parts or pinch-points. Use Cable Clips (provided) to anchor the Cords to the Mixer Feeder Frame at appropriate locations.*

21. Remove and retain the Junction Box Cover and attaching hardware.

22. Remove the Compression-type Nuts from the four weather-proof Bulkhead Connectors.

23. Place a Nut onto one of the four Weighbar Cords and route the Cord through the Bulkhead Connector and into the Junction Box. Then, strip-off the coating from each of the five leads and attach it to the appropriate color-coded terminal. BE SURE to connect all five leads from one Weighbar Cord to the same Terminal Block. After all five leads are connected, tighten the Compression-type Nut to form a weather-proof seal.

24. Make the remaining three Weighbar Cord connections into the Junction Box in the same manner described in step 23.

25. Replace the Junction Box Cover and attach it in position on the front right side of the Mixer Feeder Frame in the mounting holes provided.

NOTE: *The cutout used to route the Load Cell Cord into the truck cab MUST be smooth (free of burrs or sharp edges) to avoid cutting and damaging the Cord.*

26. Route the Load Cell Cord (existing 5th Cord) from the Junction Box into the truck cab using an existing or field-fabricated, adequately-sized, access hole.

27. Select the desired Scale Indicator mounting location inside the truck cab. Locate and drill the four 13/32″ diameter holes in the truck cab floor for attaching the Stand Base. Then, secure the Stand Base with appropriate 3/8″ diameter hardware (NOT provided).

28. Install the Indicator Stand over the Stand Base and secure it by tightening the Lock Handle. Next, mount the Indicator Mounting Bracket to the Indicator Stand with (4 each) 1/4 x 1/2 Cap Screws, Lock Washers and Nuts. Then, mount the Indicator on the Mounting Bracket with (2 each) #10-24 x 5/8 Round Head Machine Screws and Nuts.

29. Locate a 12 volt D.C. source inside the truck cab. Then, connect the red (+) Power Cord lead to positive (+) and the black (-) Power Cord lead to negative (-).

NOTE: *Only two wires (the red + and the black -) of the four-wire Power Cord are used to make the Scale Indicator to the truck's power connection.*

30. Hookup the Power Cord Plug to the Jack labeled "Power" on the Indicator. Hookup the Load Cell Cord Plug to the Jack labeled "Load Cell" on the Indicator. Refer to the Indicator Operator's Manual, turn on the Indicator and test its operation.

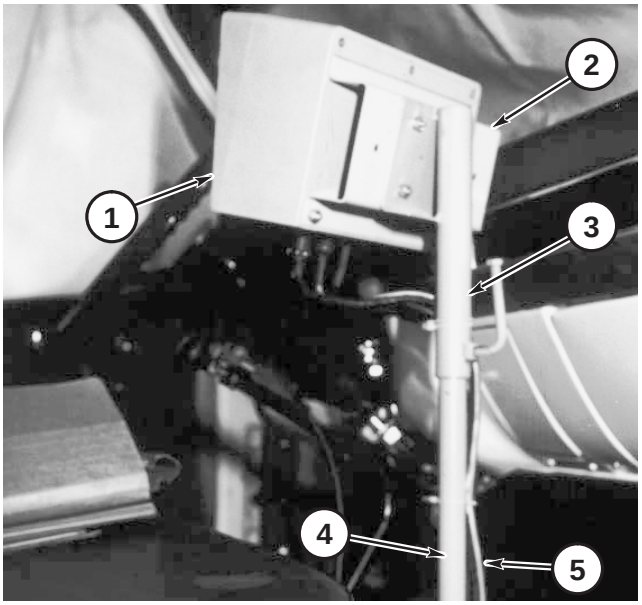
Directional Control Valve & Switch Wiring (Figs. 12, 13, & 14)

A Truck-mounted Mixer Feeder uses a Directional Control Solenoid Valve, a cab-mounted On-Off-On Spring-centered Toggle Switch to control operation of the Discharge Door and a cab-mounted On-Off-On Three-position Detent Toggle Switch to control operation of the Discharge Conveyor. Proceed to mount the Switches and make the wiring connections in the following manner:

31. In a conveniently located position in the truck cab, install the Switch Mount using two 1/4″ diameter fasteners (NOT provided).

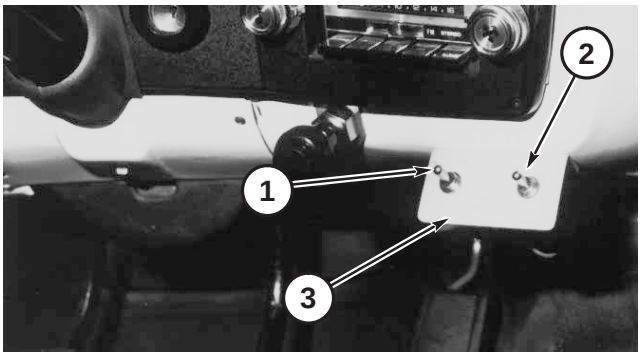
32. Referring to the drawing provided, make the appropriate wire lead connections to the Directional Control Valve. Next, pass the Switches connection end of the Harness through the same access hole used for routing the Load Cell Cord into the truck cab. Then, route the Harness to the area where the Switch Mount is located.

33. Using sound electrical procedures, make proper Harness lead connections to appropriate Toggle Switches. In addition, make wiring connections between 12 volts D.C., In-line 10 Ampere Fuse Holder and Toggle Switches indicated.



1 – Scale Indicator
2 – Indicator Mounting Bracket
3 – Indicator Stand
4 – Stand Base
5 – Power Cord and Load Cell Cord

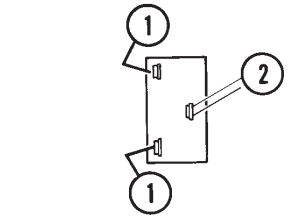
Fig. 12



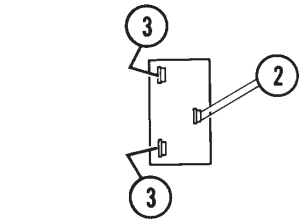
1 – Spring-centered On-Off-On Discharge Door Control Toggle Switch
2 – On-Off-On 3-Position Detent Discharge Conveyor Control Toggle Switch
3 – Switch Mount

Fig. 13: Cab Mounted Switches

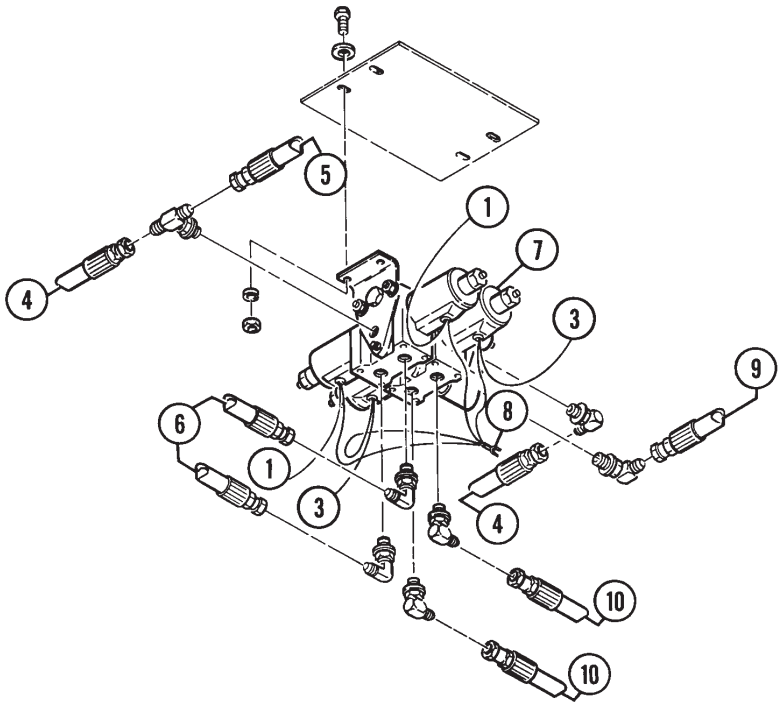
NOTE: *BE SURE to check Wiring Diagram for proper Harness connections to insure correct Switch and Directional Control Valve connections BEFORE applying power. In addition, of the eight (8) total wires coming out of the Directional Control Valve, BE SURE to ground either one of the 2 wires, from each end of the Solenoids, to the truck frame.*



Spring-centered Switch (for Discharge Door)



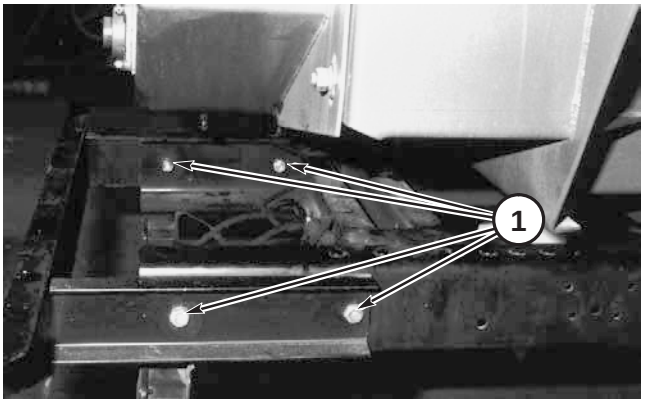
3-position Detent Switch (for Conveyor)



1 – Leads from Spring-centered Directional Control Valve Section
2 – Through In-line Fuse to Positive (+) 12 volts D.C.
3 – Leads from 3-position Detent Directional Control Valve Section
4 – Jumper Hose
5 – Return Hose to Filter Assembly
6 – Hoses to Discharge Door Control Cylinder
7 – Directional Control Valve
8 – Ground to Truck Frame (All four Leads)
9 – Supply Hose
10 – Hoses to Discharge Conveyor Motor (And Control Cylinder on 2-piece Conveyor)

Fig. 14

Rear Bumper (Fig. 15)



1 – Field-supplied Attaching Hardware

Fig. 15: Rear Bumper Bolted to Truck Frame

The Rear Bumper is a welded assembly with NO pre-drilled mounting holes. The Bumper should be bolted to the truck frame using field-supplied 1/2″ or larger attaching hardware.

NOTE: *BE SURE that, when installed, Bumper adequately protects the Chaincase from being struck and damaged.*

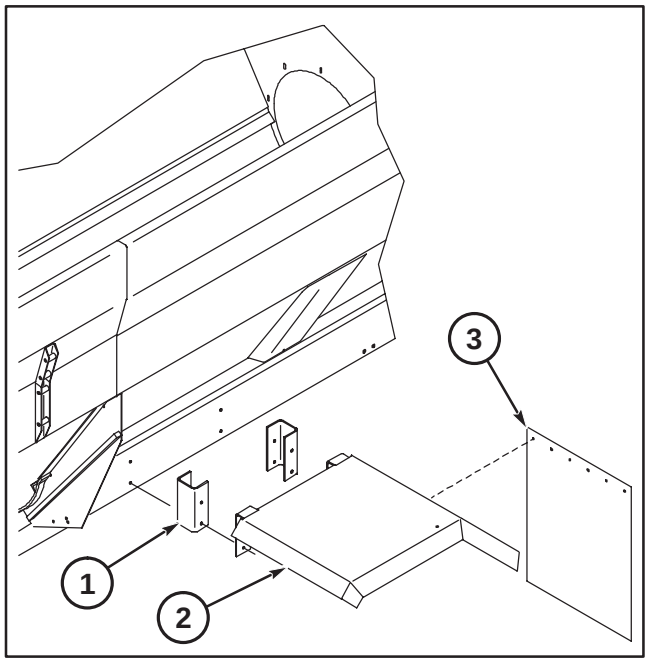
Fenders (Fig. 16)

Install the Left and Right Fenders in the following manner:

34. Position and align the Right Fender over the right rear truck tire so that the top of the Fender is flush with the junction of the Auger Trough and Mixer Feeder Frame. Then, mark the four (4) hole positions in the Frame for attachment.

35. Using a 13/32″ diameter bit, drill the four holes in the Mixer Feeder Frame. Properly orient and attach the channel-shaped Fender Mounts to the Frame using (2 each) 3/8 x 1-1/4 Cap Screws, Lock Washers and Nuts. Then, properly orient and attach the Fender to the Fender Mounts using (2 each) 3/8 x 1 Cap Screws, Lock Washers and Nuts.

36. Repeat steps 34. and 35. to attach the Left Fender.



1 – Fender Mount
2 – Fender
3 – Mud Flap (Accessory)

Fig. 16: Left Side of Mixer

Ladder (See Fig. 1)

The Ladder Assembly is designed to attach to the Mixer Feeder on the left rear area of the Tank.

37. Drill (2) 13/32 inch holes in the Tank following the locations shown in figure 1.

38. Secure Ladder to Tank with (2) 3/8 x 3/4 Carriage Bolts and Flange Nuts supplied.

39. Install the Ladder Brace to the second step of the Ladder and to the Mixer Frame corner Gusset securing with the (4) 3/8 x 3/4 Carriage Bolts and Flange Nuts supplied.

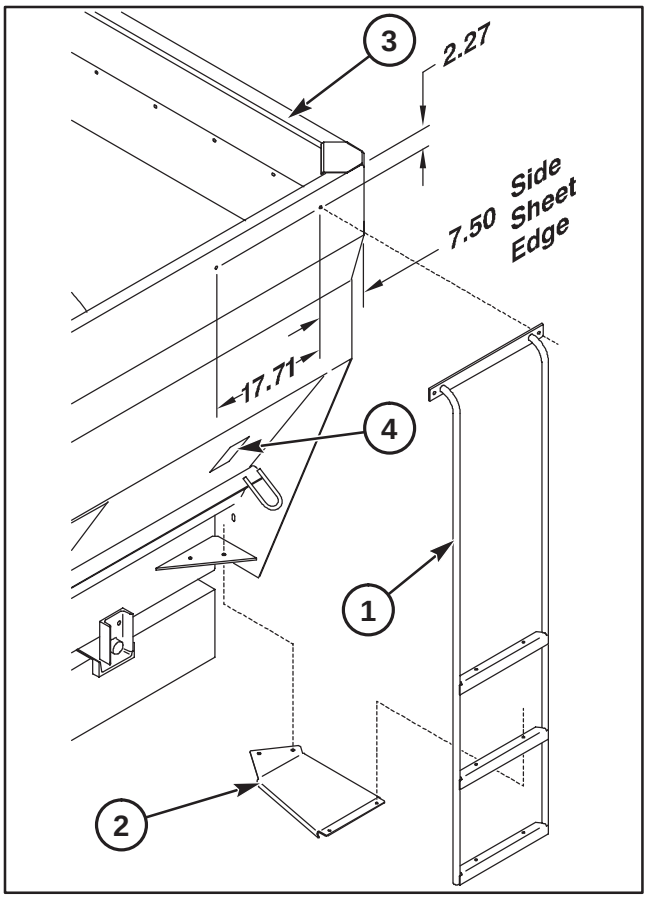
40. Install 091442 Decal (DANGER – ROTATING AUGER) on Mixer Tank positioning Decal between ladder Steps at eye level.

NOTE: *The Ladder is intended for use in adding micro ingredients to mix or observing completeness of Mix.*

Accessory Components

Mud Flaps (See Fig. 16)

Locate and drill six (6) 13/32″ diameter holes in the Mud Flaps and Fenders. Then, secure the Flaps to the Fenders with the (6 each) 3/8 x 1-1/2 Cap Screws Flat Washers, Lock Washers and Nuts.



1 – Ladder
2 – Brace
3 – Mixer Tank
4 – 091442 DANGER Decal

Fig. 1

Running Lights (See Fig. 5)

Proceed to install the accessory Light Kit as follows:

NOTE: *All individual Light and Identification Bars assemblies are secured with (2 each) #6-32 x 3/8 Self–tapping Screws. The #6-32 x 3/8 Self–tapping Screw requires a 1/8″ diameter pilot hole. In addition, a 1/8" diameter wire lead access hole will also have to be drilled at each Light. BE SURE all access holes have NO sharp edges which could damage the wire.*

1. Using the Red Light Identification Bar as a template, locate and drill the mounting and wire access holes at the top center position in the rear of the Mixer Feeder Box as shown. Then, pass the wire through the access hole and attach the Bar with two (2) #6-32 x 3/8 Self–tapping Screws.
2. Using the Amber Light Identification Bar as a template, locate and drill the mounting and wire access holes at the top center position in the front of the Mixer Feeder Box as shown. Then, pass the wire through the access hole and attach the Bar with two (2) #6-32 x 3/8 Self–tapping Screws.
3. Using the individual Light assemblies as templates, locate and drill the mounting and wire access holes at all four corner positions around the Mixer Feeder Box. Then, pass each assembly wire lead through its access hole and attach the each assembly with two (2) #6-32 x 3/8 Self–tapping Screws.
4. Starting the right rear corner, and using Butt Connectors provided, attach each Light wire lead to a common lead for all six light assemblies. At the right front corner of the Mixer Feeder Box, make the Light assembly wire lead Butt connection to a long length of wire which will be routed into the truck cab. Use the Clips provided to anchor the wire along the inside edge all the way around the Mixer Feeder Box. BE SURE to remove all slack in the wire when anchoring it.
5. At the right front corner of the Mixer Feeder Box, drill an additional 1/8″ diameter wire access hole into the Box in the area just above the end of the welded-on Wiring Tube. Next, route the long length of wire from inside the Box, through the access hole and through the Wiring Tube. Route the wire along the same path as the Directional Control Valve wires and the Load Cell Cord, through the access hole and into the truck cab.
6. Inside the truck cab, use two Butt Connectors to install the In-line Fuse Holder between the Light Kit wire and the light switch of the truck. After all wiring connections are made, install the 10 Ampere Fuse and test the Lights.

OPERATION

General Information

As a Truck-mounted unit, the functions of the Mixer Feeder are the same as explained in the MF8000 Series Operator's Manual. The truck PTO supplies all the power to the Mixer Feeder. When the PTO is engaged, the Mixing Augers, inside the Box, rotate and, the Hydraulic Pump operates to supply oil through the Directional Control Valves. One of the Valves controls oil going to and coming from the Discharge Door Cylinder. The other Valve controls oil going to and coming from the Hydraulic Motor that runs the Conveyor and the Cylinder which raises and lowers it. Each of the Valves is controlled by a Switch inside the truck cab.

Loading

While the Mixer Feeder is being loaded, if material is being slowly put in, the Mixer Feeder should NOT be running until the Box is nearly full. If a large amount of material is being dumped in by a loader bucket, the Mixer Feeder should be running while the material is added.

Mixing

With the truck engine at low idle speed, engage the PTO to start the Augers rotating. Increase the truck engine speed until it can adequately mix the load. **Do NOT OVERSPEED**! Input speed to the Mixer Feeder Chaincase should NOT exceed 1000 RPM. Completely familiarize yourself with the operation of the Truck-mounted Mixer Feeder.

NOTE: *To avoid damage to the Drive Line, do NOT engage the PTO drive with the engine running at high RPM.*

ADJUSTMENTS

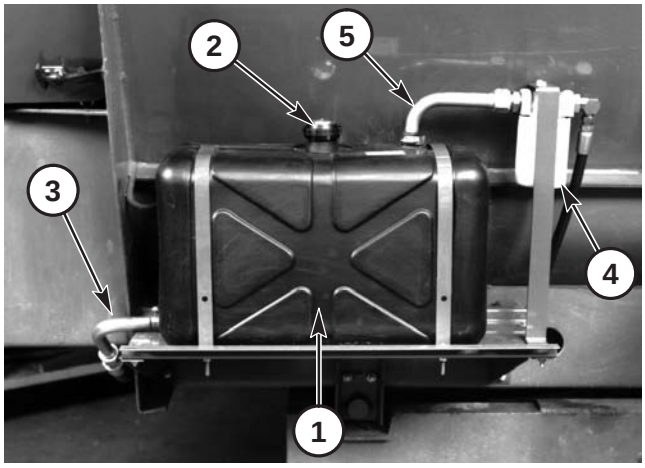
All of the adjustments covered in the MF8000 Series Operator's Manual apply to Truck-mounted Mixer Feeders. In addition, the Hydraulic Pump Drive Chain tension MUST also be checked and adjusted, as necessary. The procedure for the Pump Drive Chain tension adjustment is to slightly loosen the appropriate Idler Sprocket Mounting Bolt, so that the Idler can be moved by tapping on the Idler Sprocket with a rubber mallet or a lead hammer. Proper tension is achieved when the Chain can be deflected 1/2″ (13 mm) on the strand of Chain between the Idler and the Drive Sprocket. After the desired tension is adjusted, retighten the Idler Mounting Bolt.

LUBRICATION (See Fig. 2)

Perform all of the points of lubrication referred to in the MF8000 Series Operator's Manual. The Drive Line has additional Grease Fittings on all four (4) Cross Kits and one (1) Grease Fitting on the Slip Yoke connected to the Drive Line Tube.

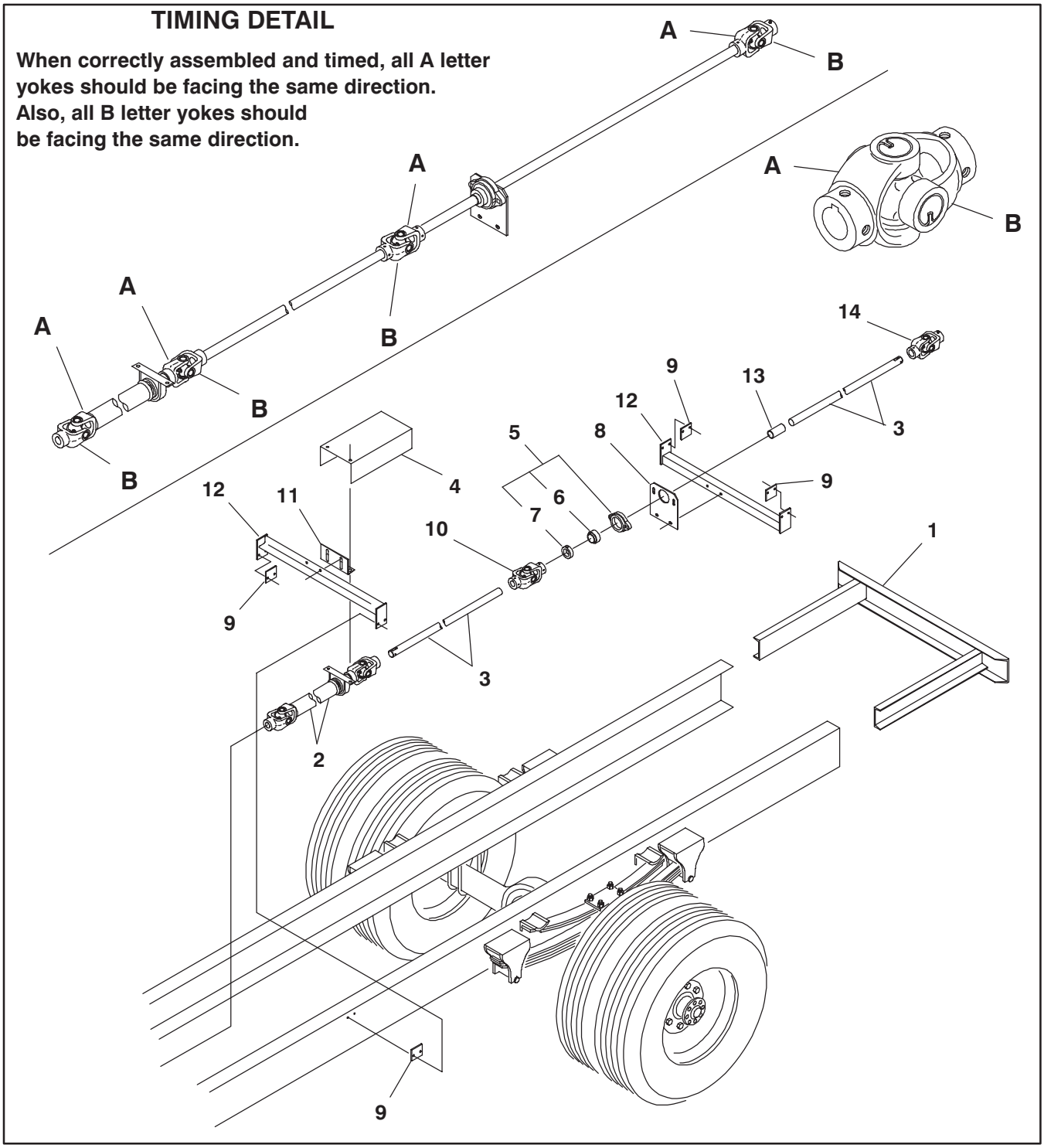
In addition, the Hydraulic Reservoir MUST be checked periodically. Maintain the oil level NEAR the top of the reservoir.

NOTE: *When checking the Hydraulic Reservoir Oil level, BE SURE to have the Discharge Door all the way open and the Discharge Conveyor completely raised, to fully retract both hydraulic Cylinders and create the lowest oil volume in the system and to avoid overfilling the Reservoir.*



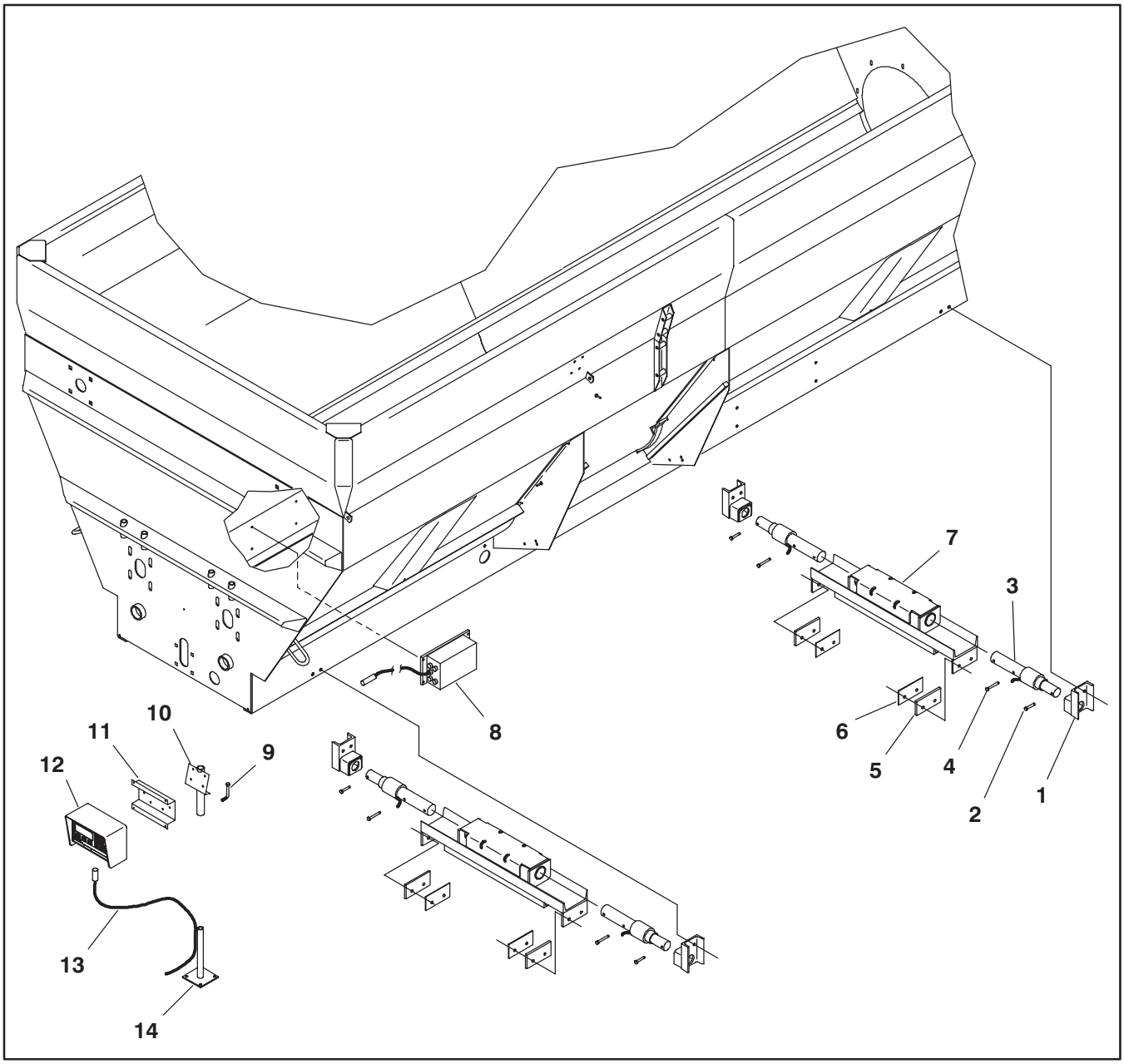
1 – Hydraulic Reservoir
2 – Reservoir Fill Cap
3 – Suction Line
4 – Filter (Change Annually)
5 – Return Line

Fig. 2: Hydraulic Reservoir



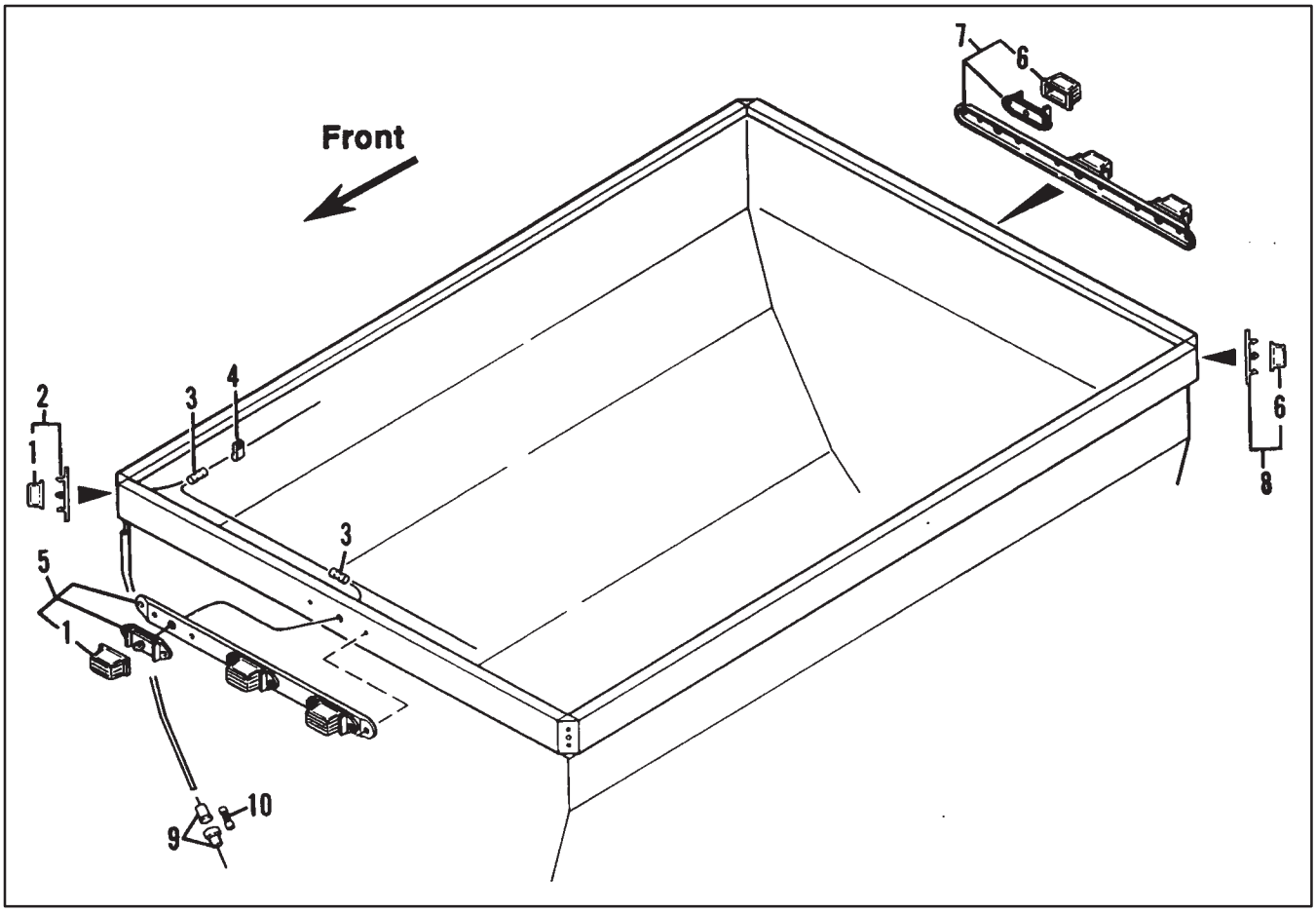
1 – Bumper
2 – Drive Line Assembly
3 – Drive Shaft
4 – PTO Shield
5 – 1-3/4″ Flanged Bearing Assembly
6 – 1-3/4″ Flanged Bearing
7 – Bearing Lock Collar
8 – Hanger Bearing Plate
9 – 1/4″ Spacer Plate
10 – Center U–Joint Assembly
11 – Bearing Mount
12 – Mount Bracket
13 – Sleeve
14 – U–Joint

Fig. 3: Rear Bumper, Mixer Feeder & Truck Drive Line



1 – Weighbar Bracket
2 – Clevis Pin 3/8 x 2-1/4
3 – Weighbar
4 – Clevis Pin 3/8 x 2-3/4
5 – Shim Plate 1/4″
6 – Shim Plate 1/8″
7 – Weighbar Mount
8 – Junction Box
9 – Adjustment Screw
10 – Indicator Stand
11 – Indicator Mounting Bracket
12 – Indicator
13 – Indicator Power Cord
14 – Indicator Stand

Fig. 4: Weighbars & Scale



1 – Amber Lens
2 – Amber Light Assembly
3 – Butt Connectors
4 – Clip
5 – Amber Identification Bar
6 – Red Lens
7 – Red Identification Bar
8 – Red Light Assembly
9 – Inline Fuse Holder
10 – 10 Amp. Fuse

Fig. 5: Optional Truck Mounted Mixer Feeder Light Kit

Index

Printed in U.S.A.